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NAME OF AUTHOR/*NOM DE L'AUTEUR* Alan McIntyre Hellyer

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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* Dr J. E Seger

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DATED/*DATÉ* October 2, 1974 SIGNED/*SIGNÉ* Alan M. Hellyer

PERMANENT ADDRESS/*RÉSIDENCE FIXÉ* # 810- 270 Roslyn Road
Winnipeg. Manitoba
R3L 0H3.

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PERCEPTIONS OF EDUCATIONAL EXPERIENCES, STUDENT SATISFACTION AND TEACHER MORALE

by

©

ALAN McINTYRE HELLYER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled . . .

PERCEPTIONS OF EDUCATIONAL EXPERIENCES,
STUDENT SATISFACTION AND TEACHER MORALE

submitted by Alan McIntyre Hellyer . .
in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Educational Administration.

J.E. Seger
Supervisor

E. Miklos

R.G. McIntosh

F.D. Oliva
External Examiner

ABSTRACT

This study investigated the relationship between (1) the perceptions held by students, parents and teachers of the school as a satisfying educational experience for students; (2) the perceptions held by students, parents and teachers and their relationship to teacher morale; (3) those factors in the school and/or the personal background of teachers which related to their level of morale; and (4) those factors in the school and/or the personal background of students which related to the level of satisfaction students felt towards their school experience.

The study was conducted in four senior high schools in the County of St. Paul, Alberta. Instruments used were the Modified Purdue Teacher Opinionaire, a Student Satisfaction Scale developed for this study, and three questionnaires to solicit personal and demographic data from the respondents. Responses were coded to enable matching of parents to students and teachers to the students whom they taught.

Data were analysed using the following statistical techniques: Pearson R Correlation, Canonical Correlation, One Way Analysis of Variance, and Chi-square Test of Significance. Significance levels of $p = .05$ were set for all analyses except the tests of significance applied to personal and demographic data, where the level $p = .10$ was applied.

Findings were that students, parents and teacher held different perceptions of the school as a satisfying educational experience for students. Substantial agreement existed between the

perceptions held by students and their parents, but teachers perceived the school in a more favourable perspective than did parents or students. Correlations between the perceptions of students and teachers was marginally significant in three schools. Parents and teachers were more in agreement than were teachers and students.

The morale of teachers differed in all schools and indicated different combinations of factors which influenced the level of morale in each school. Community Support of Education appeared to be a factor which contributed to the level of teacher morale in all schools, Teacher Rapport with Principal and Rapport Among Teachers exerted lesser influence. Teacher Morale was negatively correlated to Student Satisfaction and Parent Perception in two schools and positively related in the other two. Teacher Morale and Teacher Perception were positively and significantly correlated.

Personal factors showed that teachers with high morale were long-time residents, were economically secure and were nearing retirement. They had lower levels of teacher education but had spent more time of their teaching lives in the County. They were involved in the community life and had numerous friends among the parents.

Students demonstrating high satisfaction tended to be younger, to be active in community and school life, and appeared to derive benefit from interaction with teachers. Students with low levels of satisfaction were dissatisfied with the Personal Relations in the school, with the Institutional Aspects, the Supervision of Teachers, and the Instructional Atmosphere of the school. Evidence indicated the need for a more personalized approach to the education of students to ensure that their personal and academic needs were met and that they derived optimum satisfaction from their education.

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CHAPTER ONE

STATEMENT OF THE PROBLEM AND DEFINITION OF TERMS

The social significance of education has been underscored by legislation which assures all children between the years of early childhood and mid-adolescence of a formal education. Local organizations and government are involved in the provision of financial support for education, with the training of teachers for the schools, and with the provision of premises in which to conduct the educational activities.

To each of the participants in the educational enterprise, that is to say the students, their parents and the teachers, the school and the process of education represents different things. For the students the experience represents years of teaching at the hands of people outside of the family environment who attempt to prepare them for entry to the adult society. For parents, the educational experience represents a partial surrender of their children to the care of others and the exposure of their children to experiences and teachings over which the parents have limited amounts of control. For the teachers, the process of education provides an opportunity to interact with the young and to provide them with the knowledge and experiences believed necessary to help them to become effective members of their society. The educational system also provides the teacher with career opportunities which, apart from the satisfactions derived from teaching, yield a degree of economic and social security and, in some cases, a degree of geographic permanence.

To each group of participants, the other partners in the educational enterprise appear in different perspectives according to the quality and satisfaction which is derived from the interaction. The level of satisfaction derived from the interaction, and the amount of benefit that is perceived to accrue from it, influence the extent to which the whole enterprise is accepted as a satisfying and worthwhile experience. To the extent that this is true, the degree of acceptance and support accorded the school in the community would be related to the extent to which the school is perceived as a valuable part of the community life.

This study examined the satisfaction of a small rural community with the educational services available to them through the four senior high schools of the area. In this study students were asked to respond to questionnaires which measured their level of satisfaction with the schools and with their educational experiences in them. Parents and teachers were asked to respond to the same questionnaires. Their responses to the same questions provided a measure of the extent to which they perceived the conditions in the schools as contributing towards student satisfaction with their school experiences. A questionnaire which measured teacher morale allowed teachers to report the extent to which they perceived the community to support their efforts. Teachers were also able to express their satisfaction with the programs available for students, their satisfaction with teaching as a career, and to indicate the pressures they perceived to be exerted on them by the community in their performance as teachers.

THE PROBLEM

This study attempted to identify some of the experiences and conditions in the schools and in the community which contributed to student satisfaction with the educational experiences provided by the schools. The degree of agreement existing between students', parents' and teachers' assessments of the school as a satisfying educational experience for students was studied to discover which experiences were considered to promote the growth of student satisfaction. The morale of teachers in the study was measured to investigate the relationship between the level of teacher morale and the degree of student satisfaction. Other conditions in the schools and in the community were also examined to determine the likelihood that they influenced the morale of teachers in the performance of their duties, or the satisfaction of students with their educational experiences.

The problems investigated are stated as follows.

Problem 1.1

What is the relationship between student satisfaction and parent perception?

Problem 1.2

What is the relationship between teacher perception and student satisfaction?[1]

Problem 1.3

What is the relationship between parent perception and teacher perception?

---

[1] The terms "teacher perception" and "parent perception" are used as abbreviations for . . . the perceptions held by parents or teachers of the conditions in the schools which promoted or inhibited the growth of student satisfaction.

Problem 2.1

What is the relationship between teacher morale and student satisfaction?

Problem 2.2

What is the relationship between teacher morale and parent perception?

Problem 2.3

What is the relationship between teacher morale and teacher perception?

Problem 3.1

What factors within the school environment influence the level of teacher morale?

Problem 3.2

What factors in the personal background of teachers appear to be related to the level of teacher morale?

Problem 4.1

What factors within the school environment influence the level of student satisfaction?

Problem 4.2

What factors in the personal background of students appear to be related to the level of student satisfaction?

Problem 4.3

What factors in the personal background of parents appear to be related to the level of student satisfaction achieved by their children?

THE IMPORTANCE OF THE STUDY

Many studies have examined the factors within an organization which related to the presence or absence of employee morale, but few have attempted to relate these factors to the wider environment within which the organization functioned. An understanding of this relationship, as it applied to the school in its environment would be of value to school administrators and teachers who need to know the degree of success that attends their efforts to prepare students for entry to the adult society. A measure of student satisfaction with their educational experience may prove to be such a guide. Few studies appear to have been conducted into the extent of satisfaction students derived from their educational experiences, or the extent to which students, parents and teachers were agreed on what constituted a satisfying educational experience.

This study was important for a number of reasons. First, it attempted to relate the influence of teacher morale to student satisfaction with school. Second, it attempted to identify those items within the school and the community which related to student satisfaction and teacher morale. Third, it attempted to identify the extent to which parents and students agree on the conditions in the schools which produce or inhibit student satisfaction with school.

The findings of this study will help teachers to better understand those factors which will help students to achieve a greater degree of satisfaction from their school experiences. By identifying those factors teachers can take positive steps to ensure that students experience a form of education which is relevant to the needs of students and likely to produce a high level of student satisfaction. For administrators the study will indicate the extent to which parents and their children were agreed in their feelings towards the school, and the amount of parental support or criticism that may be expected of them. This knowledge should help administrators to better understand the needs of the community, to understand the need to constantly inform the members of the community of the objectives and activities of the school, and to help them to provide educational programs for students which will be relevant to their needs and related to their social and intellectual growth. With closer cooperation between the community and the schools, administrators may come to appreciate the value of increased community participation in the activities of the school to ensure that the work of the school and the aspirations of the community are more closely intermeshed.

DEFINITION OF TERMS

The terms used in this study and the particular meanings attached to them are listed below. Other terms which arise in the course of the study are defined as they are introduced.

Administrator: This term applied to members of the school staff who carried responsibility for administrative duties. Such members included the Principal and Vice-principal. The term did not include the Superintendent, Assistant Superintendent, School Trustees or members of the central office administrative staff.

School: The schools included in this study were four senior high schools in the County of St. Paul, Alberta which enrolled students in Grades 10, 11 and 12. Although statistical comparison between schools was not the prime purpose of this study some comparison was inevitable because of the differences in student populations and environmental conditions in which the schools were located. To preserve some measure of anonymity, schools were identified by the letters A through D and were not referred to by name.

Student: In its singular or plural form this term referred to students enrolled in Grades 10 through 12 in one of the four senior high schools.

Teacher: This term referred to those individuals who taught students in Grades 10 through 12. Because of their small numbers, Department Heads and Administrators were included with teachers in statistical analyses.

Parents: This term referred to those adults with whom the student lived during the course of the school week. These adults may have been his real parents, relatives, friends or people with whom the student resided during the school sessions.

The definitions listed below are not so clear cut as those listed above. However, they are key definitions in this study and are presented here in some detail to clarify the concept involved. The following definitions have been used as working definitions throughout this study.

School Climate: The definition of organizational climate which Halpin and Croft related to schools was presented in the form of an analogy.

> The Organizational Climate can be construed as the organizational "personality" of a school; figuratively, "personality" is to the individual what "climate" is to the organization. (1962:1)

Barnes offered a more precise definition of organizational climate which managed to illustrate the people and task components that were important to this study.

> Organizational climate refers to the way in which an organization is seen as fitting together task and people inputs in handling its key problem areas. (1968:204)

Teacher Morale: A number of definitions existed for this concept but the definition by Bentley and Rempel, used in the construction of the Teacher Opinionnaire, was considered most appropriate for this study.

> Morale refers to the professional interest and enthusiasm that a person displays towards the achievement of individual and group goals in a given job situation. (1970:2)

Student Satisfaction: This concept was similar to that of teacher morale but in a more passive sense, since students generally do not have the same opportunities as teachers to take part in the administration of the school or to determine, in any extensive sense, the direction and content of their educational experience. The work of Guba and Bidwell has been paraphrased in this study to derive a definition of student satisfaction.

> The satisfaction which a student experiences with his school is a function of the extent to which the school is perceived by the student to fulfill his expectations for personal, academic and social development, and to provide opportunities and experiences congruent with his goal aspriations (1957:66)

THE LOCATION OF THE STUDY

Several reasons shaped the decision to conduct this study in the County of St. Paul, Alberta. One reason was the desire to find a stable environment relatively free from the influences of economic fluctuations or population variations. Second, it was believed that, in an area where limited employment opportunities existed for young people, students and parents would value the educational services of the high schools as keys to wider employment opportunities for youth. Third, to the extent that the second belief was valid, it was believed that students and parents would have more sharply defined views in relation to the educational services provided by the high schools. The decision to study only students in senior high school was related, in part, to the foregoing beliefs and partly to the desire to confine the measurement of student satisfaction to a relatively small age span.

The major industry in St. Paul County was farming, but the soil and rainfall conditions in the area allowed only marginal farming activities. There was some mining and some secondary industrial activity in the County, but these activities did little to raise the employment or economic status of the area. According to the 1966 Census, the County of St. Paul had one of the lowest per-capita incomes for the Province of Alberta.

The County was predominately English speaking. But there were seven times as many bilingual persons, five to six times as many solely French speaking persons, and one third fewer English speaking persons than the provincial average. The major ethnic groups in the County were 36 percent French origin, 22 percent Ukrainian and 17 percent British. In addition, a large number of Indian reservations were located in the district. At the time of the study 513 Indian students were enrolled in County schools, 101 of them enrolled in Grades 10 through 12. A further 391 students were being educated in schools on the Indian reservations but these students were not included in the study. Indian students who were included in the study were enrolled in two schools and represented 67.2 percent of the enrollment at School A and 10.8 percent of the enrollment in Grades 10 through 12 in School D.

In broad terms, the four schools served communities of different ethnic backgrounds. Having made this generalization it should be understood that it carries the limitations appropriate to generalizations but, in this case, is used for illustrative purposes only. Bearing these limitations in mind, the student population of School A was of predominantly Indian origin. At School B the students were predominantly French in origin. At School C they were predominantly British, while at School D the population consisted of a mixture of all three groups as well as a substantial proportion of Ukrainian students. These variations in ethnic background among the students in the four high schools may have had some bearing on the different results obtained from each of the schools. However, this problem was not one of those for direct investigation in this study. Consequently, the data collected do not provide adequate evidence to answer this question.

LIMITATIONS OF THE STUDY

Certain limitations were inherent in this study as a result of conditions in the study area. Among the limitations were the small numbers of students enrolled in the schools studied. But in a study involving small schools it was difficult to overcome this obstacle without destroying the uniqueness of each school. The second limitation related to the disparities existing between the schools in terms of the physical facilities, the conditions of work for students and staff, the range of course options possible as a result of limited enrollments, and the nature of the student populations in each of the schools. These factors were directly relevant to the level of teacher morale and the extent of student satisfaction.

A certain number of parents failed to respond to the questionnaires, despite precautions in the study to overcome this possibility. Further discussion of this matter is contained in the chapter dealing with the methodology of the study. No explanation was given to account for the non-participation but one possibility, not anticipated at the planning stage of the study, was that the non-return of the questionnaires may have resulted from possible parent illiteracy in English. No attempt was made to check the validity of this possibility. Whatever their reason for not responding to the questionnaires, it was not possible to estimate their probable level of satisfaction with the educational activities and outcomes of the schools.

DELIMITATIONS OF THE STUDY

Certain delimitations were imposed during the planning of the study. Among these were the decisions to confine the study to a particular area of the province and to concentrate the study on schools with small student populations. These decisions were taken to keep the study to a manageable size and, because of the use of an instrument not yet field tested (the Student Satisfaction Scale), the St. Paul Study was considered in the light of a pilot study to refine the instruments used. These delimitations restrict the findings of this study to the specific circumstances encountered, and exert a restraint on the general applicability of the findings of this study.

ASSUMPTIONS

In conducting this study certain assumptions were made regarding the responses of the participants. It was assumed that all responses would honestly reflect the respondent's opinions, that all respondents would understand the questionnaire items, and that the same interpretation would be attached to each question by each respondent. It was also assumed that the factors which influenced the development of perceptions were equally distributed among the respondents and exercised no influence on the results.

The instrument used to measure Student Satisfaction was developed, validated and tested for reliability on students enrolled in their first year at The University of Alberta. The assumption was made that the students on whom the Student Satisfaction Scale was developed were not meaningfully different from students enrolled in the four senior high schools in the County of St. Paul.

ORGANIZATION OF THE THESIS

This chapter presented an outline of the research area and depicted the schools as interwoven segments of the whole community. The problem investigated in this study was divided into a number of problem areas and the importance of the study for teachers and administrators, as a guide to improving the quality and relevance of students' educational experiences at school was outlined. Definitions used in the study were clarified and the limitations, delimitations and assumptions germane to the study were stated.

The related literature is reviewed in Chapter Two under two main categories, first, the organizational aspects of the school and, second, the individual aspects as they relate to the participants of the study. Under these headings an examination is made of the literature relating to the organizational climate of schools, the relevance and influence of teacher morale, and aspects pertinent to student satisfaction. Literature relating to community involvment in education is also examined.

Chapter Three outlines the methodology used in the conduct of the study and describes the research design. Details by which the research instruments were selected and/or developed are given. The means of data collection and the statistical procedures applied to the data are discussed in this chapter.

The social, economic and demographic profile of the study area are described in Chapter Four, which also presents certain data related to the participants to supplement the data contained in their responses.

In Chapter Five an analysis of the data collected in the study is made. The analysis of the data is organized to correspond with the problems and sub-problems identified and stated in Chapter One.

The conclusions and implications of the study and recommendations for future research are contained in Chapter Six. An Appendix presents samples of the instruments used in the study together with the raw data derived from their use.

CHAPTER TWO

REVIEW OF THE LITERATURE

The review of the literature and related research are presented in this chapter in two sections. The first deals with the organizational aspects of the school under three sub-headings: 1) The Organizational Climate; 2) The Morale of Teachers; and 3) The Satisfaction of Students. The second section reviews the literature dealing with Community Involvement in Education. The third section relates the literature to the present study.

In treating these topics separately there is a risk that they may be seen as unrelated to one another. This chapter develops the pattern of interdependence which exists between teachers who work in the schools, the students who participate in its activities and who are influenced by its policies, and the parents who observe the activities of the schools, who are influenced by them and who influence the educational policies of the schools as members of the community.

ORGANIZATIONAL ASPECTS

The Organizational Climate

The concept of organizational climate is not the major focus of this study but is used, in a sense, as a point of departure for the theoretical framework on which this study is based. References to organizational climate in this chapter are made to illustrate the points of departure from the parameters of the organizational climate concept.

In the view of Halpin and Croft, it was the responsibility of the Principal to create and maintain the organizational climate of the school as one ". . . in which he, and other group members, can initiate and consummate acts of leadership." (1962:10) In their view, the organizational climate of a school should be characterized by openness and functional flexibility rather than a closed climate which demonstrated a high degree of functional rigidity. While Halpin and Croft confined their explanations of organizational climate in the schools, as measured by the Organizational Climate Description Questionnaire, to the quality of the relationships between the principal and the teachers, they recognized that other factors may exert strong influences on the climate of the school. Among other factors they listed the following.

> . . . the socio-economic status of the school's patrons; the biographical and personality characteristics of the principal and the teachers; the "quality" of the students; the attitude of the parents towards the school; the school's physical plant; the teachers' salary schedule; the educational and administrative policies of the school district; the location of the school; and . . . social interactions that occur between teachers and the principal. (1969:9)

In this study the major emphasis was on the relationship existing between the school and the community or, in more precise terms, between the students, their parents and the teachers. Because of the limitations inherent in the scope of the OCDQ and the concept of organizational climate, an instrument was sought which took account of the attitudes of teachers, the quality of their interpersonal relationships, and the quality and nature of the relationship perceived to exist between the school and the community. The instrument chosen to meet these and other requirements was the Revised Version of the Purdue Teacher Opinionaire. This instrument is described more fully in the chapter dealing with the research methodology.

At the same time as the decision was taken to go beyond the parameters of the organizational climate concept, it was recognized that much of the research conducted on organizational climate was relevant to the theme of the present study and contributed data relevant to the various outcomes of organizational climate.

Studies by Pyra (1965), Wilson (1966), Keis (1967) and Brickner (1971) yielded results which indicated positive relationships between school size and student attitude, between climate and teacher turnover, between climate and leadership behavior, and between changes in climate and the years of education of the principal. Marsh (1970) found that the perceptions held by students and teachers of the climate in the school were different and varied from situation to situation. He was led to conclude that ". . . there is not one climate present in school but a whole multitude of climates varying from classroom to classroom and from subject area to subject area." (1970:iv) These findings undermined the global concept of climate developed by Halpin and Croft and introduced the possibility that climate may be much more of a personal quality which varied from individual to individual and situation to situation.

Nicholas, Virjo and Wattenberg (1965) examined the relationship between socio-economic status of the community and the climate of the school, and the type of problems brought to elementary school offices. They found significant differences in the types of problems presented to schools in "low" and "high" socio-economic areas. In low status areas, principals lost much of their initiative for action as a result of the nature and frequency of the problems generated by students in the school. In high status schools, principals were able to retain much of their initiative for action because most of the pressures exerted on the school came from parents and were presented in a more routine and businesslike manner. Principals of smaller schools were able to involve parents in school activities and so maintain a better relationship between the school and the community. This opportunity was often denied to principals because of the greater size of their schools and the greater burdens imposed on teachers as a result of higher teacher/student ratios.

The conditions in schools under which students and teachers interacted have been shown as related to the type and extent of pressures exerted on the school by the community. It also appeared evident that principals of smaller schools had a good deal more flexibility open to them in their response to community pressures than was the case for principals of larger schools. The likelihood existed, therefore that size of school was an important factor influencing the school climate, especially where the school was subject to external pressure such as in areas of low socio-economic status. But external pressures on the school, the quality of teacher/principal relationships, and the quality of the relationships between teachers and students were factors shown to contribute to the morale of teachers, as measured by the Purdue Teacher Opinionnaire.

No clear differentiation seemed to exist between the collective morale of teachers and the climate of the school. Halpin and Croft did not distinguish between the two concepts and conceded that they were ". . . mapping roughly the same domain of inquiry that other investigators have described as morale." (1962:7) The section which follows deals with the research and literature which the respective authors have considered to be related to teacher morale.

The Morale of Teachers

Research evidence indicated that the level of teacher morale had a direct bearing on the relationships between teachers, his colleagues and his students. Koura (1963) and Phillips (1973) demonstrated that students exposed to teachers with high morale were more likely to perform better and to develop more positive attitudes towards their studies than if exposed to teachers with low morale. Lolis (1962) found a positive relationship between teacher morale and the attitudes of teachers to parents, parents to teachers and teachers to students. These findings indicated that teacher morale was a key factor in achieving good educational outcomes and improved school/community relations. To the extent that these findings were valid, what other factors might be related to the level of teacher morale in the school environment?

Halpin and Croft saw the principal as responsible for providing leadership and cohesion in the school and of generating and sustaining favourable climate. Sweat (1963), who examined the influence of the personality of high school principals in the school found no significant relationship between teacher morale and the position of the principal on the Authority-Democratic personality continuum. However, a greater percentage of democratic administrators were willing to participate in the study, and teachers in democratically administered schools were found to have higher levels of morale than teachers in authoritarian administered schools. Tirpak (1970) reported similar findings. Ellenberg (1972), in a study of factors affecting teacher morale found that teachers' opinions of whether they were understood and appreciated by the principal influenced their level of morale. In the main, it seemed evident that principals who engendered high levels of morale and who administered "open climate" schools were warm and people oriented and understood and appreciated the teachers who worked with them. These findings agree with the earlier statement by Likert who described effective leaders of cooperative ventures in the following terms.

> He is supportive, friendly and helpful rather than hostile. He shows confidence in the integrity, ability and motivations of subordinates rather than suspicion and distrust. His confidence in subordinates leads him to have high expectations as to their level of performance. (1961:101)

While principals had the power to influence the climate of the school, the level of teacher morale and the educational outcomes of the school, the attitudes of the community towards the school had an important influence on the behavior of the principal. Nicholas, Virjo and Wattenberg indicated the different types of problems presented to principals of schools in high and low socio-economic areas, and the different challenges they posed to the administrative capabilities of the principals.

> Urgency, crises and harrassment characterized the challenges confronting principals in "low" setting schools, whereas, businesslike routine operations were the nature of the challenges presented to principals in "high" area schools. The most serious results were that much of the principals' freedom to initiate action was usurped from them by these challenges in the "low" socio-economic settings, whereas, principals in the "high" area schools retained more control over choice of activities to be initiated. (1965:121-22)

Nicholas and his associates also saw the size of the school, as well as its socio-economic level, as being important factors in defining the range of responses available to the principal and his teachers.

> The effects of large concentrations of children in "low" setting schools may need to be evaluated in terms of the climate they create for the school organization and for pupil adjustment.
> With less pupil problems confronting him, the principal in the "low-open" school was free to initiate more varied activities than was possible in the "low-closed" school. He was able to devote time to drawing parents into involvment in school affairs, and encouraging livelier interaction patterns with staff, outside agencies, auxiliary services, and the community. Meanwhile, the principal and staff of the "low-closed" school were virtually immobilized, insofar as other activities were concerned, by the flood of pupil-behavior problems. (1965:125)

The difficulty of anticipating teacher morale under conditions described by Nicholas and his colleagues was illustrated by the different concepts of teacher morale held by Redefer and Bonner. Redefer saw teacher morale as being sensitive to situational variables and expressed his views in this form.

> Teacher morale is a complex and complicated area for investigation. Morale cannot be succinctly defined and minutely measured . . . Operationally, morale consists of many interrelated factors whose effective weighting may differ with the individual and the situation. (1963:59)

Bonner, on the other hand, viewed morale as a cohesive and self-sustaining force which persisted in the face of external pressures which might, ordinarily, lower the level of morale. He clarified his views in these terms.

> Morale serves as a catalyzer and reinforcer of esprit de corps, an agent making for persistence and group self-maintenance in the face of difficulties and disruptive tensions. It fosters in-group organization and uniformity of behavior. (1959:71)

Halliday (1970) provided evidence which supported Bonner's view of morale. Investigating the relationship between parent attitudes, teacher morale and community unrest, Halliday found little variation in the level of teacher morale although teachers perceived changes to have occurred in the level of community pressure and community support for the school. But the demonstration of community dissatisfaction with the activities and policies of the schools have become a relatively recent phenomenon. The influence of community dissatisfaction is discussed more fully in the final section of this chapter.

In the past the internal relations in the school have exerted a considerable influence on the level of teacher morale. But evidence now suggests that changes have taken place in the status relationships within organizations which have implications for the administration of schools, the levels of teacher morale, the satisfaction of students, and the involvement of the community in educational matters.

Traditionally, the human-organizational relationship was one where the individual worked to fulfill the expectations of the organization and to satisfy its demands. The satisfaction afforded to the individual from his organizational role was of secondary importance. Haney argued that now "society is beginning to impose other requirements upon its organizations" and proceeded to expand his point of view.

> Some spokesmen feel that the structure and climate of today's organizations are in many respects inimical to the mental health and emotional development of its members. They call for a serious reappraisal of and, where advisable, significant changes in our organizations.
>
> Moreover, the organization's members, particularly its younger members, are expecting more of their employers. They . . . demand greater satisfaction on their job for their psychological needs. (1973:12-13)

Haney attributed the transition in member/organizational relationships to the growing satisfaction of members' needs for economic security and the subsequent emergence of the need for personal and professional satisfaction from organizational membership, and greater inclusion in matters relating to their personal and professional activities.

Boyan supported and extended Haney's general statement into one which related directly to teachers in the school environment.

> Changes in teachers as individuals, changes affecting teachers as members of school organizations, changes in the external environment, and changes in the posture of extra-school organizations have all contributed to a new level of teacher confrontation with the authority structure of the school. (1967:1)

Although Boyan has portrayed the transition to be directed towards a state of confrontation, it could be argues that the likelihood of conflict would be related to the degree of flexibility of the principal and his willingness to delegate administrative responsibility and decision-making to teachers. By extension, the flexibility of the principal could determine the extent of involvement that was extended to members of the community in educational matters in the school. These views agreed closely with McGregor's earlier position when he argued the futility of directive management when the prime needs of employees were for inclusion and the satisfaction of their "social, egoistic and self-fulfillment needs . . ." (1957:28)

As Boyan pointed out, teachers were now better trained, more professionally oriented and now exerted increasing pressure for involvment in the development of educational policies. The effectiveness of their involvement was supported by Leiman's research evidence. He found (1961) that higher levels of teacher morale, better attitudes towards their principal, their colleagues, their students, towards themselves and towards their profession as teachers resulted from greater participation in school administrative activities. Sergiovanni (1967) reported similar findings when he reported that achievement, recognition and responsibility were factors which contributed strongly to teacher satisfaction.

In this section the literature and research illustrated Halpin and Croft's assertion that morale was a multi-dimensional phenomenon related to factors within as well as outside the school. The principal was portrayed as a key figure in the creation and maintenance of the climate of the school and the level of teacher morale. At the same time, the principal was shown to be subject to pressures from the community which, through their usurpation of his administrative prerogatives, limited the range of administrative responses available to him in his relations with the community. The decisions taken by the principal, in response to community pressures, and the reaction of the community to his actions, strongly influenced the atmosphere within the school and the tone of the continuing relations between the school and the community. In addition to the influence of the external pressures, the size of the school as portrayed by the teacher/student ratio had a profound influence on the internal behavioral state of the school, the morale of teachers, the quality of education available to students and the nature of the external relations with the community.

Under favourable conditions, high teacher morale was shown to have beneficial outcomes for student achievement, to promote better relations with colleagues and administrators in the school, with students in the classroom and with parents in the community. These outcomes were interrelated with the growing pressures from teachers for inclusion in the decision-making activities of the school.

The following section deals with the satisfaction of students.

The Satisfaction of Students

Although schools were organizations created for the education and social development of the young, the educational concerns of students often took second place to the problems generated in the administration of the educational organization. This study attempted to view the educational enterprise from the viewpoint of the student and to discover those areas of the educational enterprise which provided him with the greatest measure of satisfaction. For these reasons, the definition of Student Satisfaction was expressed in terms on the needs of students. The definition paraphrased the description developed by Guba and Bidwell (1957:66) to portray teacher satisfaction, and was phrased as follows.

> The satisfaction which a student experiences with his school is a function of the extent to which the school is perceived by the student to fulfill his expectations for personal, academic and social development, and to provide opportunities and experiences congruent with his goal expectations.

Defined in this sense, Student Satisfaction reflected the student's perceptions of the extent to which the school acted for his benefit, to provide him with experiences, skills and opportunities necessary to pursue his chosen goals in life.

Coleman found that the student's interest in school and his interest in reading outside the school, his self-concept with regard to his learning and success at school, and his sense of control of his environment were related to the level of student achievement. (1966:319)

Of these three factors, the student's sense of control over his environment was found to be the factor most strongly related to his achievement. Coleman developed his explanation in this manner.

> . . . For children from disadvantaged groups, achievement or lack of achievement appears closely related to what they believe about their environment: whether they believe the environment will respond to reasonable efforts, or whether they believe it is instead merely random and immovable. In different words, it appears that children from advantaged groups assume that the environment will respond if they are able enough to affect it; children from disadvantaged groups do not make this assumption, but in many cases assume that nothing they will do can affect the environment. (1966:321)

For those students, to whom the school environment appeared as "random and immovable", in Coleman's terms, the prospects of success and satisfaction from their schooling appeared remote. In a sense, the level of student satisfaction with school was a measure of the student's ability to adapt to externally imposed conditions, an ability to utilize learning experiences and to direct such experiences to the satisfaction of the student's own needs, interests and aspirations.

Dyer (1972) writing on "Equal Opportunity", questioned the appropriateness of present educational goals and pointed to the obligation of society to provide opportunity for "many kinds of personal and social, as well as intellectual growth . . . not only to help pupils to learn but to get them to want to learn . . . " (1972:517) He then proceeded to illustrate the importance that attached to the establishment of a meaningful link between the educational activities of the school and the personal, social and intellectual needs of students.

> Indeed, a case can be made for the proposition that the prime purpose of education is to help children in their search for their own goals, while taking note of the fact that there are

> certain minimum levels of competence necessary for their survival and the survival of society generally. (1972:517)

By examining the school as an educational institution, and by attempting to measure student satisfaction with their educational experience, students were removed from the status of passive partner and given the role of the active critic. Instead of examining the extent to which the students conformed to the expectations of the school, the students were asked to indicate the extent to which they felt the school conformed to their expectations and provided them with a satisfying educational and personal experience.

Anderson and Tissier (1973) pursued a similar line of inquiry when they asked the question, "Is there a relationship between the manner in which the schools are run and the educational aspirations of students?" In their examination of "Social Class, School Bureaucratization and Educational Aspirations" they measured the level of student alienation to certain aspects of the school. Among the factors measured were feelings of powerlessness, meaninglessness, futility and self-estrangement. These factors resembled the student reaction to the "random and immovable" environment described by Coleman. Measurements on these criteria reflected the level of students' frustration and growing resentment at being engaged in a meaningless series of activities which had little relevance to their own needs. Anderson and Tissier found the program in which the student was enrolled "seemed to be the single largest determinant of his aspiration level." (1973:46) They went on to explain.

> . . . Indeed, there is good reason for this, since there can be no clearer indication to a student that he should give up college aspirations than his placement in a terminal

> educational program, . . . Among other things, such programs serve a function in lowering the generally high aspirations of students. (1973:46)

Kaufman (1969) reported similar findings, related to the influence of terminal courses on student attitudes. He found that students enrolled in college preparatory courses had more positive perceptions of school climate than students who were enrolled in terminal courses.

Duggal (1969) stressed the psychological component that underlay student feelings of powerlessness and dissatisfaction. He found student unrest was attributable to psychological rather than material aspects of the school environment. Students were increasingly frustrated at the irrelevant offerings of the school and their inability to influence the educational process to cater to their needs. Educators were seen as being prepared to make concessions on material issues such as greater involvment in student government, but were reluctant to concede on matters relating to students' satisfaction with their education, namely on matters relating to student participation in the planning of educational programs. Attention was paid by Prigmore (1968), Richardson (1968), Duggal (1969) and Worsham (1971) to the unfavourable attitudes generated by educators through their inflexibility towards change, their lack of understanding at student frustration at irrelevant courses, and their preoccupation with the belief, expressed by Cunningham as, "We are the professionals. We are expert. We know the answers." (1970:365) At the same time, researchers were quick to point to the advantages to be gained in greater student satisfaction and improved student attitudes when students were involved more meaningfully in shaping their educational experiences.

Student satisfaction was portrayed as being related to the quality and relevance of the educational experience afforded to students during their schooling. Factors related to the level of student satisfaction were shown to be related to the extent the school is able to provide experiences relevant to the personal, intellectual and career growth of students. Much student dissatisfaction arises from frustration at irrelevant courses and the sense of powerlessness that results from inability to have more meaningful experiences replace them.

Evidence seems to indicate that students, just as much as teachers, are seeking greater personal satisfaction from their years of schooling. They seek an education related to their personal development as much as to their academic or career aspirations.

The section which follows deals with the relationship between the school and the community and the involvement of community in education.

THE COMMUNITY CONTEXT

In reviewing the literature on community involvement in education it is necessary to distinguish between two forms of community involvement in the schools. The first of these relates to those activities which involve parents and adults in the schools as volunteers, teacher aides, etc., in such a way that the administrative prerogatives of the principal are not usurped or threatened. Fantini draws attention to the range of activities, using parents and adults in the schools, which are quoted by school administrators as evidence of community participation in the schools. However, adult participation in these activities does little to increase the active voice of the community in the conduct of school affairs. Rather, it serves as a token gesture to community involvement and as a device to lessen, to some extent, the gap between the school and the community. The second form of community participation in education is reflected by the defeat of school budgets by taxpayers, and by examples of wholesale replacements of trustees at school board elections. These examples of community action, in Fantini's view, reflect growing dissatisfaction with the standards of education coupled with a need to make effective protest against the rising costs of education. (1972:676)

In the face of rising community pressures for active involvement, educators reacted in a variety of ways. Some were reluctant to grant more than token involvement in school matters in the belief that professional skill and experience in education were the key factors to successful administration. Others appeared puzzled at the reason for the growing community interest in education. Cunningham described their reaction in these terms.

> Not only are such professionals nonplussed by the motivation behind much of the new citizen interest; they find it difficult to reconcile these impulses with time-honored professional control over what happens in school. (1970:365)

With continued community interest, some educators developed a sensitivity to public scrutiny to the point where they became increasingly defensive and created artificial barriers between the schools and the communities they were created to serve. In Cunningham's view, administrators' sensitivity served only to accentuate the state of distrust which seemed to exist between the schools and the community.

> The sensitivity of school officials in many places has reached the point where innocent requests for information are interpreted as real or imagined attacks upon the schools. Many school personnel are extraordinarily cautious and communicate a hostility to the public which they are professionally committed to serve. (1967:182)

Williams reported similar findings in regard to the attitudes of educators towards the community. He described the erosion of communications networks, which held potential for encouraging dialogue between school and community, to a public relations function which advertised the most favourable activities of the school and ignored both the deficiencies of the schools' educational services and the growing community concerns which focused on them. Like Fantini and Cunningham, Williams placed the responsibility for the widening gap between school and community on the educators' perceptions of their administrative capabilities and the growing bureaucratization of schools. He expressed his views in these words.

> The constriction of the external communication process from a position which ideally would promote dialogue to one which is largely unilateral is further compounded through the evolution of school systems into professional-bureaucratic forms of organization. In such organizations, the educators operate under the norm that they are specially trained experts, uniquely qualified to deal with the problems of education. Such a stance serves to legitimize the exclusion of laymen from the process of decision-making within the school systems. (1969:1)

While the public right to information and involvement in educational matters was accepted, in a theoretical sense at lease, many educators seemed to fear that implementation of the theory would erode their influence or supplant them as educational decision-makers. Fantini described their dilemma in the following manner.

> Often the right of the consumer to an account for professional performance, while acceptable in theory (to administrators), is in effect nullified by challenges to what are considered basically professional affairs. Public education is a public as well as a professional business. The current educational climate is one of reform. It is a natural consequence that the public would seek its rightful role in such an important process. (1972:679)

Continued community pressure for inclusion in educational decision-making activities, while accepted in theory by some educators, was seen by many as a potential threat to the continuation of the traditional role of educators as the arbiters of educational policy and practice. While the inclusion of the community was perceived as a threat to their administrative prerogatives and professional judgements, it appeared unlikely that educators, on their own initiative, would move for greater inclusion of community members in the decision-making activities of the schools. Doak attributed the reluctance to change to the threatening atmosphere which educators perceived to surround them. He argued that changes in the attitudes of educators was an essential prerequisite to changes in the schools.

> The climate of an organization is the first and most important concern in initiating and sustaining change. People simply do not change in a threatening atmosphere. They may change surface behaviors--conform--receive and respond at the lowest level possible and acceptable to the powers that be; but attitudinal change and subsequent behavioral change must be preceded by perceptual change. (1970:368)

Bridges saw the perceptual change as being related to the reciprocal trust existing between the community and the educators. In his view, three factors were related to the development and maintenance of trust. In a general sense, the first of these depended on the knowledge of the purposes and motives underlying proposed actions, and a knowledge of how an individual or a group would act in a given situation. To the extent that distrust existed, each group in the negotiations would attempt to structure the situation as far as possible to reduce the elements of uncertainty and unpredictability. Under such conditions, the freedom of action for both groups was limited and the atmosphere of distrust was reinforced. The second factor Bridges saw as related to the formation of trust was the perceived credibility or capability of one of the parties to perform undertakings given. If one of the parties to the negotiation was perceived as promising more than could reasonably be performed, his good faith or competence was called into question. Such behavior was open to a variety of interpretations, none of which increased the level of trust surrounding the negotiations. The third element in building trust, in Bridges' view, was the person's perceived ability to act impartially. When one was perceived to be influenced more by the assembled data than by his own preconceptions, a greater degree of trust was attached to his professional judgement and a greater degree of freedom allowed for it to be exercised. (1963:3)

While the growth of trust between educators and the community was seen by Bridges as important to the effective interaction of school and community, the need for joint consultation was seen, in some quarters, as too important to be allowed to develop as a matter of chance. In the Province of Quebec, legislation in 1971 made the establishment of School Consultative Committees mandatory for all schools. The committees were composed of parents, members of the community and educators and resource people, as required. Their function was to identify areas of public concern in relation to the schools, to consider alternatives for alleviating the concerns, to call expert opinion to assist them, and to make recommendations to the principal. The principal was not obliged to accept the recommendations of the committee but, if he declined their advice, he was aware that the committee had rights of access to higher authority in the school system to decide on the educational/administrative merits of the matter. The situation of enforced negotiation would be unlikely to reduce, at the outset, the atmosphere of mutual distrust. But as principals began to appreciate the resources and sincerity which School Committees applied to the solution of educational problems it would seem likely that greater levels of trust and mutual respect would develop.

Research evidence has verified the benefits, in terms of improved school/community relations, that result from the involvement of members of the community in the activities of the school. Hall (1971) studied the effects of involving community members in all phases of a curriculum study in an Illinois School District. His findings indicated a significant positive change in the attitude of the community members involved in the study towards the school. He concluded that more effective changes in community attitude towards the school could be achieved through personal interaction between educators and community members than as a result of reliance on the more widely used public relations programs. Halliday (1970) investigated the attitudes of parents to schools with high and low levels of student unrest and found that parents were less supportive of schools where student unrest was high. In schools where student unrest was low the level of parent support was high and closer relations existed between parents and teachers. Halliday concluded that the problem facing educators was not so much how to interest parents in school activities as it was to channel their interest towards constructive ends.

Summary

The principal has been shown to be a key figure in establishing and maintaining the organizational climate of the school. A climate which promoted teacher involvement and encouraged initiative led to beneficial outcomes for teachers, for students, and in improved relations between the school and the community.

Students looked to the school to provide them with experiences related to their personal, social and academic needs and to provide them with skills to enable them to work towards their own goals. Where schools were perceived to be inflexible in their approach to student needs, and where course offerings were considered irrelevant, yet incapable of change, attitudes of dissatisfaction and hopelessness were found to emerge among students. Student responses to the irrelevance of schools varied according to the socio-economic status of the community. In higher status areas, parental pressures were more evident and were expressed in terms of parental expectations for the school. In lower status areas, the students were more likely to create behavioral problems which compelled administrative recognition.

The major problem inhibiting greater community involvement in education appeared to be the reluctance of principals and administrators to yield or to share their traditional role as educational decision-makers. In many cases, the honesty of administrators was called into question as they demonstrated their reluctance to yield to community involvement except on their own terms. While willing to negotiate on trivial matters of involvement, they were not prepared to negotiate on matters which related to shared decision-making activities. The constant community pressures for more extensive and more effective involvement in school affairs led many administrators to adopt a defensive posture and to develop an increased sensitivity to real or imagined criticism of their activities. Attention was paid to the importance of establishing levels of trust between administrators and the community before effective negotiations on the future role of the school could be conducted.

THE PRESENT STUDY

Attention has been drawn throughout the review of the literature to the different perceptions held by educators, students and members of the community on the role and function of the school. This study examined the satisfaction of students with their school experience. Student satisfaction was defined as:

> . . . a function of the extent to which the school is perceived by the student to fulfill his expectations for personal, academic and social development, and to provide opportunities and experiences congruent with his goal expectations.

At the same time as student satisfaction was being measured, teachers and parents were asked to respond to the same questionnaire and to indicate the extent to which they perceived the conditions in the school to be conducive to the development of student satisfaction. In this manner, the schools provided a common focus against which parents and teachers were able to compare their expectations with their perceptions of reality as it existed in the schools. Because the participants in the study, namely the students, parents and teachers were related to the school in different ways, each could be expected to hold different perceptions of it.

In view of the confrontation that appears imminent between school administrators and the community, concerning the role and function of the school, it would seem appropriate that some assessment be made of the extent of commonality that exists between the expectations of the three groups of participants in the school environment.

Research has linked teacher morale with favourable student outcomes, and has also shown that teacher morale can be influenced by the real or perceived pressures exerted on the school by the community. In this study, teacher morale was measured for a number of reasons. First, it provided a means of identifying those aspects of the school environment which contributed to the level of morale. Second, it provided a measure of the teachers' satisfaction with his work environment and allowed a comparison with the level of satisfaction expressed by students with their experience in the same school. Third, it allowed a comparison to be made between the level of teacher morale, or his satisfaction with the school, and the perceptions of the school held by members of the same community.

The chapter which follows deals with the research design and methodology used in this study.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

This chapter describes the instruments used to gather data in this study. It describes the manner in which the Student Satisfaction Scale was developed and validated and outlines the manner in which the study was organized and the instruments used.

INSTRUMENTATION

Five instruments were used in this study. The first of these was the Revised Form of the Purdue Teacher Opinionaire, which was used to measure teacher morale. The second instrument was developed for this study and is referred to as the Student Satisfaction Scale. It was used to measure the perceptions of students, parents and teachers of the extent to which the conditions in the school are likely to promote student satisfaction with school. The remaining three instruments were questionnaires developed to collect biographical and demographic data from the students, parents and teachers taking part in the study. A more detailed description of the instruments used, and the manner of their use in this study, follows.

The Purdue Teacher Opinionaire.

This instrument was developed by Bentley and Rempel in 1961 to measure teacher morale. In its original form it consisted of 145 items which were selected to sample eight areas of opinion related to the interaction of teachers in the school environment. The authors describe the development of the instrument in the following manner.

> In the development of the instrument an experimental form was administered to a large representative sample of high school teachers. The final choice of items for the *Opinionaire* was based on internal consistency item analysis techniques. . . . The 145 item instrument was validated against peer judgements made by fellow teachers. The peer judgements were obtained from teachers at the time they responded to the *Opinionaire*. To accomplish the peer judgements, a rating form was attached to the *Opinionaire*. . . . teachers were asked to identify by name on the rating form, . . . from three to ten teachers whom they considered to have the highest morale, and also to select an equal number whom they considered to have the lowest morale. . . .
>
> On the basis of the peer judgements, "high," "middle," and "low" teacher morale groups were identified. . . . To make certain that the items were working effectively at various morale levels, factor analysis procedures were applied to "high," "middle," and "low" teacher morale groups. These additional analyses made it possible to identify ten rather than eight factors. All four analyses were used to refine and complete the present 100-item instrument. (1970:2,3,4)

The Revised Form of the Opinionaire was subsequently administered to 3023 teachers in Oregon and Indiana and the results analysed. The Opinionaire was readministered to the same group approximately four weeks later and the two sets of data tested for correlation. The test-retest correlation of the two data were found to be such that r = .87, with 60 percent of the correlations between the factor scores being higher than r = .80, while all correlations were higher than r = .62.

Bentley and Rempel described the ten factors of the Revised Opinionaire in the following manner.

> Factor I. "Teacher Rapport with Principal" deals with the teacher's feelings about the principal, his competency, his interest in teachers, his ability to communicate and his skills in human relations.

> Factor II. "Satisfaction with Teaching" pertains to teacher relationships with students and feelings of satisfaction with teaching.
>
> Factor III. "Rapport among Teachers" focuses on a teacher's relationships with other teachers. The items solicit the teacher's opinions regarding the cooperation, preparation, ethics, influence and competency of his peers.
>
> Factor IV. "Teacher Salary" pertains primarily to the teacher's feelings about salaries and salary policies.
>
> Factor V. "Teacher Load" deals with such matters as record-keeping, clerical work, "red tape", community demands on teacher time, extra-curricular load, and keeping up to date professionally.
>
> Factor VI. "Curriculum Issues" solicits teacher reaction to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship.
>
> Factor VII. "Teacher Status" samples feelings about prestige, security and benefits afforded by teaching. Several items refer to the extent to which the teacher feels he is an accepted member of the community.
>
> Factor VIII. "Community Support of Education" deals with the extent to which the community understands and is willing to support a sound educational program.
>
> Factor IX. "School Facilities and Services" has to do with the adequacy of facilities, supplies and equipment and the efficiency of the procedures for obtaining material and services.
>
> Factor X. "Community Pressures" gives special attention to community expectations with respect to the teacher's personal standards, his participation in outside-school activities and his freedom to discuss controversial issues in the classroom. (1970:4)

The Purdue Teacher Opinionaire was selected for this study, in preference to the Richardson and Blocker "Faculty Attitude Survey" and the Halpin and Croft "Organizational Climate Description Questionnaire" because it dealt specifically with schools, was developed with high-school teachers as the respondents, and viewed teacher morale in an environmental context wider than that provided by the immediate work situation. For example, teachers were asked to record their perceptions of community pressures on their activities, the extent to which they felt they were accepted members of the community, and the extent of their involvement with extra-curricular activities.

The Student Satisfaction Scale

This instrument was developed when a search of the literature failed to reveal an instrument considered suitable for the age level of the students to be used in the study. To develop the instrument, a number of first-year university students were invited to list those conditions in high school which, in their view, were important to the development of student satisfaction. The students, who had left high-school some eight months previously, submitted approximately 75 items. It was possible to combine some of the items owing to the similarity of the content or the attitudes portrayed.

From the items submitted, a basic questionnaire of 60 items was constructed and administered to a second group of 81 first-year university students. They were asked to indicate, on a five-point scale, how each of the conditions described in the questionnaire would, in their view, affect the satisfaction of students in high school. Approximately three weeks after the questionnaire was first administered, the same group of students was asked to respond to the same questionnaire. On this occasion, however, the 60 items were rearranged in a different order. The responses of the students to the questionnaire in the re-test situation were collected and analysed.

The data were factor analysed, using the Varimax rotation, and it was found that a four-factor pattern tended to emerge. The Varimax rotation was used in this instance as it tended to maximize high factor loadings and to produce items which were factorially pure. To select those items which appeared to be most discriminating, and to reduce the number of items in the questionnaire, an arbitrary criterion for selection was established. It was decided that those items which loaded .45 or higher on their respective factors would be included in the revised form of the questionnaire which, following this process, now numbered 38 items.

The responses to these 38 items, obtained for the original test and the retest, were again analysed to determine the reliability of the instrument. Using the Pearson Product Moment Correlation between the means of the test and retest results, it was found that the value of the correlation was such that r = .998. The high correlation can be explained, in part, by the influence of practice or memory as a result of a lapse of only three weeks between the test and retest, despite the rearrangement of items on the retest. But the high correlation value obtained between the results of the test and retest also indicated that the instrument possessed an acceptable level of reliability.

When the data derived from the original test of the 38 items was again factor analysed, it was found that the results obtained could be explained in terms of a five-factor configuration. It was decided that the five factor version of the Student Satisfaction Scale would be used in this study. The five factors derived in this manner are described below.

> Factor I. "Personal Relationships" related to the personal relationships existing within the school. Students are recognized as individuals. Staff try to help students in an atmosphere of friendliness and equity.

Factor II. "Institutional Aspects" refers to the atmosphere of the school. Items of this factor seem to reflect an institutional atmosphere. Teachers leave the school as soon as they can, there is little relationship between school and the community, and courses seem unrelated to students' needs. There seems also to be an atmosphere of hostility, restriction and lack of recognition for achievement.

Factor III. "Supervisory Attitude" relates to the attitude of teachers to students. There is close supervision, attention to routine matters, lack of concern by teachers for students' personal or educational problems, and a rejection of student identity.

Factor IV. "Instructional Atmosphere" refers to the school atmosphere in relation to the courses offered. A formal, impersonal, prescriptive relationship exists which inhibits interaction between teacher and student. Student laxity is penalized while teacher laxity goes unchecked. Product orientation and rigidity of administration appear to be implicit in this factor.

Factor V. "Student Identity" is a minor factor related to Factor I, but seems to reflect the desire of students to identify with their peers and to be accepted as individuals within the school environment.

Factor I consisted of 11 items which loaded between .442 and .928 on the primary loading, with 63.7 percent of the items loading above the level of .6. Negative secondary relationships were found between Factors II, III and IV. Five positive secondary relationships with Factor V loaded between .206 and .449. The remaining secondary relationships ranged in size from .129 to .331, with three of these being related to Factor III.

Factor II consisted of eight items which loaded between .444 and .771 on the primary loading, with 62.5 percent of the items loading above the level of .6. Negative secondary relationships were found with Factors I and V, while Factors III and IV were positively related. The strongest relationship was with Factor III, with three items between .303 and .368 on the secondary loadings. Three negative relationships with Factor V ranged in size from .131 to .368 on the secondary loadings.

Factor III consisted of eight items which loaded between .458 and .680 on the primary loading, with 62.5 percent of the items loading between .4 and .5, with 37.5 percent loading above .6. Negative secondary relationships were found between Factors I and V, with positive relationships between Factors II and IV. The strongest of the secondary relationships was between Factors I and V, with loadings which ranged from .160 to .482.

Factor IV consisted of nine items which loaded between .417 and .695 on the primary loadings, with three items each loading at .4, .5 and .6. Negative secondary relationships were demonstrated with Factor I (two items) and positive relationships with Factors II and III. The strongest secondary relationship was with Factor III, with four items which ranged from .292 to .433 on the secondary loadings. The three items which related to Factor II carried secondary weightings from .204 to .473.

Factor V was the minor factor of the cluster and consisted of two items. These loaded .642 and .645 on the primary loading and were related to Factors I and IV on the secondary loadings.

Details of the items contributing to each factor, and their loadings on the primary and secondary factors, are given in Appendix A.

The data derived from the first and second administration of the Student Satisfaction Scale were analysed further to determine the degree of correlation between the means of the items in Factors I through Factor V, to establish the degree of stability existing in the factors between the first and second administration of the instrument. The results are presented in Table 1, together with the Kuder-Richardson KR-20 Reliability Coefficient for each factor.

Table 1

Correlation and Reliability Coefficients
Between Means on Test and Retest
Student Satisfaction Scale

Factor	Items	Pre-Post-Test Correlation	KR-20 Coeff.
I	11	.907	.998
II	8	.873	.998
III	8	.874	.998
IV	9	.849	.975
V	2	.505	.885

The validity of the Student Satisfaction Scale was not tested during the development stages beyond the initial tests for face validity and the item selection made as a result of the factorial analysis. A process of validation was planned during the field administration of the instrument. During the study, after the student and teacher data were collected, teachers were given class lists of the students they taught and were requested to rate each student, on a scale of "High," "Medium," and "Low", according to the teacher's perceptions of the student's satisfaction with school. These data were used separately to establish the validity of the Student Satisfaction Scale. In most cases, multiple ratings of students' satisfaction were obtained from the teachers. Teacher estimates of student satisfaction were subsequently compared with students' actual satisfaction scores, using a Pearson Product Moment Correlation. It was found that the correlations between the two groups of scores were sufficiently high that the probability of such correlations occurring by change were below the level of $p = .05$. The correlation values and probability levels for each of the schools is shown in Table 2.

Table 2

Correlations between Teacher Estimates
of Student Satisfaction and Student Scores
on the Student Satisfaction Scale
By School

Location	Correlation	Probability
School A	.433	.005
School B	.328	.010
School C	.465	.000
School D	.247	.000

On the basis of these data, collected in four schools of different size, each with different student populations of varying background characteristics, it was accepted that the Student Satisfaction Scale represented a valid measure of student satisfaction.

Questionnaires

Three questionnaires were constructed for parents, students and teachers to gather personal information to supplement the data derived by the instruments described above. Information relating to the age, sex and educational status of parents was gathered, together with supplementary data relating to their economic, residential and occupational status in the community. Parents were also asked to indicate the frequency of their contact with the school on matters relating to the educational progress of their child. They were also asked to report on the extent of their satisfaction with such meetings, and on their general satisfaction with the amount of information they received from the school.

Information was also solicited on the extent of their participation in the social, sporting, service and church activities of the community.

These data were considered relevant in the light of Knill's (1961) and Goldhammer's (1956) findings that the age, education, socio-economic status and involvement in school activities were all related to the attitudes parents held towards the school. In this study it was expected that greater opportunities would exist in smaller communities for greater involvement in community activities, that these activities would provide opportunities for closer interaction between teachers and parents, and that the greater interchange of views as well as the personal contact would lead to more favourable attitudes being held towards the school and the activities it performed.

Questionnaires to teachers sought information similar to that asked of parents but included additional questions relating to the length of teacher training, teaching experience, length of service in the County and their future plans in relation to their teaching career. Other questions sought information relating to their contact with parents on a social basis, and their involvement in community affairs.

Questionnaires to students sought biographical information similar to that asked of parents and teachers. Additional questions were asked about the extent of student interests in extra-curricular activities, their perceptions of where parents obtained their information about the school, and the extent of satisfaction students felt with the information available. Space was provided on the student questionnaires for students to list up to seven teachers with whom they had taken courses during the past year. This information enabled the matching of the students' views with the views held by teachers who had taught them during the year.

Copies of the questionnaires and other instruments distributed to parents, students and teachers are included as Appendixes C, D, and E.

DATA COLLECTION

Approval to conduct this study was obtained from the Superintendents of the County of St. Paul School Division and the St. Paul Regional High School Board. The study was also discussed with the principals of the schools to be involved to gain their approval for and cooperation in the study. Plans were formulated by which the study could be conducted so as not to cause undue disturbance to the normal conduct of the schools. The Principals' offer to make school time available to enable all students to complete the study at one time was accepted. The Principals' offer made it possible for the data to be collected more rapidly and probably resulted in a higher rate of return for responses than may have been the case had the study instruments been distributed and collected by mail.

Teachers were instructed by the writer on the purpose of the study and on the method of administering the instruments to students. Students were allowed to complete the Student Satisfaction Scale and the Student Questionnaire at school and were asked to take home to their parents the documents for their completion. The completed documents were to be returned to the school for collection on the following morning. In the smaller schools these arrangements worked satisfactorily but in the large high school certain difficulties reduced the effectiveness of the distribution and collection procedure. Owing to problems of scheduling and course options, some home room teachers were unable to distribute the study instruments to their students. Arrangements were made for the returns from these students to be forwarded by mail from the school office, but the number of returns received in this manner was small. These problems, which were not anticipated at the time of the distribution of the kits to the teachers, resulted in a lower rate of return from this school than was the case with the other schools. Details of the rates of return from each of the schools are presented in Table 3.

Table 3

Participant Responses in this Study
(Percent Response in Brackets)

	School A	School B	School C	School D
Teacher Response	12 (100)	10 (100)	12 (100)	28 (80)
Student Response	39 (60.9)	62 (80.7)	95 (71.9)	226 (41.9)
Parent Response	35	57	88	197

All participants in the study received individual kits which contained all necessary documents and instruments for full participation in the study. In each kit was an introductory letter to the participant which described the study, the data processing to be used, and the steps taken to preserve the anonymity of the respondent. Kits for students and parents contained copies of the Student Satisfaction Scale, the IBM 5047 Answer Sheet, and the appropriate questionnaire for students or parents. The Answer Sheets of parents and students were matched by means of an I.D. number. Explanations appropriate to the use of the I.D. numbers were included in the kits. The use of I.D. Numbers avoided the disclosure of respondent identity and, subsequently, enabled the matching and sorting of responses for statistical comparison. Kits for teachers contained materials similar to those in students' and parents' kits but included a Teacher Questionnaire and a copy of the Purdue Teacher Opinionaire. To facilitate sorting and identification of responses, each kit was color coded as follows: Teachers - blue, Students - yellow, Parents - green.

When data collection was completed, the information gathered was transferred to IBM computer cards and was identified thereafter by I.D. Number. Original Answer Sheets, which bore the respondent's name, were kept on file to verify ambiguous responses but were not used as part of the study or the subsequent statistical analysis. The use of the I.D. Number enabled the matching of student responses with those of their parents and allowed teacher responses to be matched to the responses of students he had taught during the year. Such complete reliance on I.D. numbers, and the direct coding of responses by participants on IBM Answer Sheets caused misgivings during the preparatory phase of the study. But fewer than one half of one percent of the responses received had to be rejected because of incorrect coding which concealed the intent of the respondent when marking the Answer Sheet. Routine inspection was sufficient to ensure that multiple markings, which would cause rejection by the optical scorer, were detected.

To provide for the late return of student and parent responses to the study, each school agreed to issue general reminders to students regarding the return of study documents. Returns collected in this way were mailed to the author and were included in the total collection of responses. As mentioned previously, responses from the largest high school were proportionately lower than from the other schools in the study. No satisfactory explanation could be obtained for these events or, more importantly, could the number of returns from students and teachers be raised above the levels indicated in Table 3.

The use of pre-packaged kits for students, teachers and parents greatly facilitated the distribution of questionnaires and ensured that each participant received the correct set of documents to enable full participation. The use of IBM 5047 Answer Sheets, which were overprinted specifically for the scoring needs of this study, permitted the machine scoring of responses, the rapid transfer of data to computer cards, and the elimination of errors and delays implicit in the hand-punching of data.

TREATMENT OF THE DATA

As mentioned above, responses from participants in this study were machine scored and transferred to IBM computer cards. The only data which could not be handled in this manner were items relating to the personal and demographic data of teachers. The need to hand-punch these data resulted from the inability to provide coding space on the IBM 5047 Answer Sheet, owing to the inclusion of the 100-item Purdue Teacher Opinionaire on the Answer Sheets for teachers.

The data gathered from each group of respondents were as follows.

Students:	I.D. number for each student Scores on the Student Satisfaction Scale Personal and demographic data I.D. numbers of up to seven teachers

Parents:	I.D. number for each parent Scores on the Student Satisfaction Scale Personal and demographic data
Teachers:	I.D. Numbers for each teacher Scores on the Student Satisfaction Scale Scores on the Purdue Teacher Opinionaire Personal and demographic data

It should be clarified at this point that the responses of parents and teachers to the Student Satisfaction Scale represented measures of the parents' and teachers' perceptions of the conditions in the schools which related to the level of student satisfaction. The instrument represented, therefore, a vehicle by which the different perceptions of students, parents and teachers towards the conditions in the schools could be measured and compared.

The personal data for students, parents and teachers were not processed, at this stage, beyond the transfer of the data to IBM computer cards. Other scores, from the initial responses of the participants, were used to generate additional data. Appropriate scoring programs were used with the item scores of the Student Satisfaction Scale to derive scores on each of the five factors and to yield, as well, a total score of Student Satisfaction. This procedure was followed with the data from students, parents and teachers. A similar process was applied to the item scores of the Purdue Teacher Opinionaire so that scores were produced for each of the ten factors as well as a total score for Teacher Morale. A series of computer cards now existed on which the I.D. numbers, total and factor scores on the Student Satisfaction Scale, and personal data for all respondents were listed. In addition, cards existed which recorded the total and factor scores of teachers on the Purdue Teacher Opinionaire, which measured teacher morale.

The I.D. Numbers of teachers and students were used to sort teachers and students into hypothetical "classrooms". This process was adopted to match teachers with the students they had taught through the year. It also enabled a comparison to be made between the perceptions of the school held by teachers and students who had interacted in a student/teacher/classroom experience.

The sorting process was conducted by means of a computer program and the selection was made on the basis of the teacher I.D. numbers included in the students' responses.

The establishment of the "classroom unit" also provided a necessary basis for subsequent comparison by the Canonical Correlation technique.

STATISTICAL TECHNIQUES

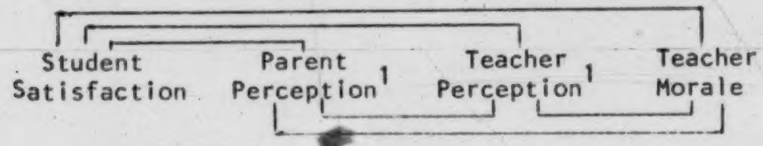
In this study four major statistical techniques were used to analyse the data. These were the Pearson Product Moment Correlation, the One-Way Analysis of Variance, Canonical Correlation, and the Chi Square Test of Significance. An explanation of each of these techniques, to illustrate their usage and characteristics and their appropriateness for this study follows.

The Pearson Product Moment Correlation

This technique was used with various data to indicate the existence of possible relationships between variables and to identify them for subsequent statistical analysis. It was also used to measure the relationships between the responses of participants to the different instruments used in this study. A series of inter-correlations were developed between the scores of students, parents and teachers on the measures of teacher morale and student satisfaction. The following diagram clarifies the nature of the inter-correlations developed in this manner.

Figure 1

Inter-correlations Measured Between the Scores of Students, Parents and Teachers on Teacher Morale and Student Satisfaction



The Pearson Product Moment Correlation technique was chosen for this type of analysis because of assumptions made concerning the quantitative nature of the data generated by the two instruments used in the study. It was assumed that responses by participants to the items of the Student Satisfaction Scale and the Purdue Teacher Opinionaire represented quantitative assessments of their feelings towards the situations described in the questionnaires. It was assumed, for example, that the responses, "Agree," "Probably Agree," "Probably Disagree," "Disagree" represented a progression of opinion from one extreme to another, such that they approximated an interval assessment. Whether these responses were true interval variables is open to question, but Ferguson drew attention to the practice of attributing interval status to ordinal variables.

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[1] The terms "teacher perception" and "parent perception" are used as abbreviations for . . . the perceptions held by parents or teachers of the conditions in the schools which promoted or inhibited the growth of student satisfaction. Both responses were measured by the one instrument, namely the Student Satisfaction Scale.

> In psychological work many variables are in fact ordinal, although for statistical purposes they are, quite justifiably, commonly treated as though they were interval or ratio variables. For examples, scores on intelligence tests, scholastic aptitude tests, attitude tests, personality tests, and the like, are in effect ordinal variables, although they are commonly treated as though they were of the interval or ratio type. (1966:15)

Other attributes of the Pearson Product Moment Correlation technique which supported its use in this study were its ability to handle raw data and its ability to provide a robust measure of the relationship between two variables. One of the pre-conditions relating to the use of this technique was that data being compared should be approximately equal in terms of the magnitude of their variance. However, Glass and Stanley pointed out that "homoscedasticity is a property of very large bodies of bivariate data. One should not expect equality of variance . . . when the n's are small, say of the order of 100 or less." (1970:141) One consequence of the smallness of the numbers used in this study was that the correlation coefficients derived should be larger, to achieve statistical significance, than would be the case had larger number of subjects been used in the study.

The requirement of homogeneity of variance, together with the requirement that the data should be distributed in linear fashion, were pre-conditions to be met if the Pearson Product Moment Correlation coefficient was to be used for predictive purposes. No such conditions applied to the technique when it was to be used, as in this study, as an analytical tool.

The One-Way Analysis of Variance

This procedure was used to analyse the responses of students on the Student Satisfaction Scale and teacher responses on the Teacher Opinionaire to identify those factor scores which contributed most to the levels of Student Satisfaction and Teacher Morale. That is to say, the technique was used to determine whether students' and teachers' factor scores departed from the mean score of each factor to an extent greater than could be attributed to chance fluctuations.

While certain pre-conditions, such as the normality of the population, the unbiased nature of the data, and the homogeneity of the variance of the samples, should be met in the use of the ANOVA technique to ensure the validity of the results, writers appear agreed that the rigorous observation of these conditions was not detrimental to the use of the technique. Popham emphasized the robustness of the technique as follows.

> There is increasing evidence, however, that even though fairly significant departures from strict theoretical assumptions may exist, analysis of variance is sufficiently "robust" that it will still yield results which may be meaningfully interpreted. (1967:179)

Ferguson commented on the flexibility of the ANOVA technique when he referred to the difficulty of demonstrating lack of normality in data derived from small samples. He drew attention to the effects of departure from the requirement of normality in the following manner.

> In general, the effect of departures from normality is to make the results appear somewhat more significant than they are. (1966:294)

Similarly, with departures from the requirement of homogeneity of variance, Ferguson stated that "Moderate departures from homogeneity should not seriously affect the inferences drawn from the data." (1966:295)

In view of the foregoing comments, it seemed likely that the data derived from the small numbers of respondents in this study, and the minor departures from the pre-conditions for the use of the ANOVA technique would not seriously jeopardize the validity of the results if due caution was exercised in rejecting results which demonstrated only marginal significance.

The Canonical Correlation

This technique was developed originally by Hotelling (1935, 1936) and provided a means of examining the interrelationship between two sets of measurements on the same subjects simultaneously. Cooley and Lohnes defined canonical correlation as "the maximum correlation between linear functions between the two vector variables." (1971:169) They pointed out that the canonical correlation technique had the ability to locate additional pairs of linear functions such that the correlation between the new pairs of canonical variates was maximized, and such that they were uncorrelated with all previously located functions in both domains. In this sense, the canonical correlation technique displayed the structural relationship across domains in much the same way as factor analysis displayed the structural relationship within domains. Cooley and Lohnes proceeded further in their explanation of the usefulness of the canonical correlation technique and pointed out that, "geometrically, the canonical model can be considered an exploration of the extent to which individuals occupy the same relative positions in one measurement space as they do in the other." (1971:36)

The canonical correlation technique required the satisfaction of the same pre-conditions as did the other statistical techniques discussed above, namely, the normality of distribution, the homogeneity of variance, and the freedom from bias in the sample being measured. In addition two other conditions were important. These were the need to have a sample of adequate size, although a minimum size of sample was not defined. However, it was pointed out that small samples led to small determinants in the calculation of the canonical correlations and these, in turn, led to artificially high correlations being generated. The second condition related to the need to minimize the degree of linearity between variables within sets.

To meet the latter two requirements, canonical correlations were computed using the total numbers of teachers in the four schools rather than compute canonical correlations for each school, as was originally intended. To meet the second requirement, to reduce linear dependence, factor scores only were used in the calculations and the total scores of each set of factors were excluded from the calculations.

In this study comparisons were made between the perceptions of the school held by teachers, students and parents, and between the perceptions held by students, teachers and parents and the level of teacher morale. To make the comparison as meaningful as possible, the responses of teachers were matched with the responses of the students they taught. To achieve these comparisons, students' responses were matched to the teachers from whom they had taken courses during the year. Mean factor scores were derived from the student responses and compared with the factor scores of each teacher. The "classroom unit" provided a common basis for the comparison through Canonical Correlation of, say, student satisfaction on the one hand, and teacher morale on the other, which resulted from the classroom interaction.

The Canonical Correlation process identifies those components of each variable which provide the highest inter-variable correlation. These correlations become the first pair of canonical composites. The process is repeated to identify those components of each variable which provide the next highest inter-variable correlation which is not correlated to the first pair of canonical composites. These correlations become the second pair of canonical composites, and so on. The value of the process, in Darlington's view (1973:436) is that it identifies the minimum number of traits that would have to be controlled or partialled out in order to eliminate all important linear relations between sets X and Y. In other words, how many traits are needed to explain the relationships between sets X and Y?

Chi Square

This technique was used to evaluate the probability that differences observed in the responses of participants to certain questionnaire items resulted from influences other than those attributable to chance fluctuations.

Parents, students and teachers were divided into groups according to whether they had scored above or below the median score on the Student Satisfaction Scale. The scores of each group were then compared to determine whether the differences between their scores were of sufficient magnitude to achieve statistical significance.

The Chi square technique was appropriate to this situation as the data were composed of discrete variables, which were not distributed in a normal manner. Further, this technique was appropriate for use with small numbers of responses, such as were evident in this study.

This chapter has described the instruments used in this study and explained their derivation, development and applicability to this study. Information was also provided on the questionnaire items which were used to gather personal and demographic data from parents, students and teachers.

The methodology used in the study was described, and the procedures outlined by which data from different groups of respondents to the study could be identified, matched and compared. The relationship of these methods to the subsequent statistical analysis was also defined.

The statistical procedures used in the analysis of the data were discussed, together with considerations of the appropriateness of the statistics for the study and the conditions to be observed in their use.

The following chapter deals with the environment from which the data for this study were derived. A description is given of each of the schools from which data were collected to illustrate the diverse characteristics represented in all the school communities.

CHAPTER IV

DESCRIPTION OF THE SAMPLE

This chapter describes the sample on which this study was based in terms of enrollment data for the high schools and the social, demographic and personal characteristics of the parents, students and teachers who took part in the study. At the beginning of the chapter, data related to the parents, students and teachers are treated separately but where the subject matter was of joint concern the data are combined and considered as a composite of the responses of each group.

THE SCHOOLS

This study involved the four high schools in the County of St. Paul which offered courses to students in Grades 10, 11 and 12. Three of the schools were located approximately 20 miles North-West, North and South-East of St. Paul, while the fourth school was located in the town itself. The latter school was the most recent school to be built in the County. It was a Regional High School which offered a wide range of shop and academic courses for students in Grades 10, 11 and 12. At the time of the study a policy of free transfer of students within the County was in operation. Under the provisions of this policy, 12 students from School A and 11 from School B, 23 students in all, were enrolled in School D. However, the new school had provided a stimulus to the smaller high schools to make their courses more appealing to students and so retain their enrollments. In addition, the facilities of the new high school were used by the smaller schools wherever possible to supplement their efforts to implement ~~new~~ and more appealing courses. In the case of School C, it had so structured its school day that the shop and home economic facilities in the school were made available to a smaller high school close by to help provide a range of course options more suited to the students' interests.

The scattered location of the high schools provided a different work environment for students and teachers. To combine the results derived from the different schools would conceal the individuality of each of the schools and could conceal those conditions which influenced the satisfaction of students with their education experience. Similarly, conditions which influenced the level of teacher morale may have been concealed by the combination of data derived from each of the schools. Each group of respondents is, therefore, described separately.

The following section deals with the demographic data which apply to students, parents and teachers. To provide a focus for the study, each school was regarded as a separate entity and the students, parents and teachers associated with that school were referred to, for the sake of brevity, as students, parents or teachers of School X. While it may appear that comparisons between schools were the prime purpose of this study, this was not the case. However, some comparisons were inevitable because of the different environmental conditions in which each of the schools operated.

THE STUDENTS

The students who participated in this study ranged in age from under 16 years of age to over 21 years, but only in two schools, namely Schools C and D, was the age of students in excess of 19 years. In broad terms, 40 percent of the student respondents were male and 60 percent were female. Details of the age-grade distribution of students in this study are given in Table 4.

In Schools A, B and C an average of 80 percent of students lived in the country. In School D, 44 percent of the students lived in the country and 56 percent lived in the town. In all schools, more than 80 percent of the students had lived in the area for more than 10 years. But the length of time that students had lived in the area varied in each of the schools. In School B, 90.4 percent of the students had lived in the area more than 10 years, in School A the proportion was 82.1 percent, in School D, 76.5 percent and in School C, 75.1 percent.

In terms of their involvement in extra-curricular activities, students responded in a manner similar to that reflected in their length of residence. Eighty percent of the students in Schools A and B expressed an interest in extra-curricular activities, while 60 percent of the students in School C and 55 percent of the students in School D made similar responses. In the case of School D, some allowance may be in order to compensate for the students who lived in the country. It may well be that the bussing arrangements for these students precluded full participation in extra-curricular activities. This possibility was not explored in the course of this study as it was not a major focus of interest. In similar manner, since student involvement in school activities was of greater concern than the specific nature of the extra-curricular activities they pursued, no definition of extra-curricular activities was given. The responses received were interpreted as a reflection of activities which the students, themselves, perceived to

Table 4

Age and Grade Distribution of Student Respondents
(Rounded Percent - By School)

Age	Grade 10	Grade 11	Grade 12	Student Response Data
School A				
Under 16	25.6	----	----	Students enrolled 64
16 - 17	23.1	30.8	12.8	Student response 39
18 - 19	----	----	7.7	Percent response 60.9
20 - 21	----	----	----	Sex distribution
22 and over	----	----	----	Male 33.3 Female 66.7
School B				
Under 16	17.4	----	----	Students enrolled 78
16 - 17	15.9	33.3	15.9	Student response 63
18 - 19	----	3.2	14.3	Percent response 80.7
20 - 21	----	----	----	Sex distribution
22 and over	----	----	----	Male 31.7 Female 68.3
School C				
Under 16	12.6	----	----	Students enrolled 132
16 - 17	23.2	26.3	14.7	Student response 95
18 - 19	----	1.1	21.0	Percent response 71.9
20 - 21	1.1	----	----	Sex distribution
22 and over	----	----	----	Male 47.4 Female 52.6
School D				
Under 16	19.1	1.3	----	Students enrolled 539
16 - 17	17.7	29.7	11.6	Student response 226
18 - 19	1.3	3.5	12.4	Percent response 41.9
20 - 21	0.4	0.4	1.8	Sex distribution
22 and over	0.4	----	0.4	Male 48.7 Female 51.3
				Total = 100 percent

be activities supplementary to the normal routine of the school rather than participation in a specific set of activities.

Further data related to students have been combined with data from parents and teachers and are presented later in the chapter. The next two sections of this chapter deal with matters relating to teachers and parents as separate groups of respondents.

THE PARENTS

Parent response to the study was very satisfactory. The rate of response from parents, in relation to the number of student responses, ranged from 87.2 percent for School D, 89.7 percent for School A, 91.9 percent for School B to 92.6 percent for School C. These rates of return were indicative of the extent of interest and support accorded this study by parents.

The proportion of male to female parent responses remained relatively constant for all schools and closely approximated the rate of response demonstrated by students (60% female, 40% male). Response from female parents represented 58 percent of the total return, with 42 percent of the returns being made by male parents.

The median age for all parents was in the category of 40 - 49 years. In general terms, 86 percent of the parents who responded had lived in the area for 10 years or more. For School B, 94.6 percent of the parents had lived in the area 10 years or more, For School C the proportion was 88.6 percent, School D 82.8 percent and School A, 77.0 percent.

Parents reported varying lengths of formal education, ranging from under 6 years to 16 years or more. Some 58.2 percent of the parents reported 7 to 9 years of formal education, while 27.2 percent reported 10 to 12 years. Parents in School B reported more years of formal education than did parents in other schools, 98.2 percent of the parents in School B reported between 7 and 12 years of formal education. Parents of other schools reported varying periods of formal education as follows: School A, 82.8 percent, School D, 82.0 percent and School C, 78.6 percent. When related to the type of employment pursued by parents, 63.8 percent of all parents reported that they were engaged in managerial or skilled forms of employment. In this study farmers were considered to occupy managerial positions. In School B, 75.5 percent of parents reported they were engaged in managerial or skilled occupations. In School D, 64.3 percent of the parents were grouped in this category, together with 62.9 percent of parents in School A and 52.4 percent of the parents at School C. Full details of the occupational/educational status of all parents are reported in Table 5.

In response to the questions investigating parental interest in high school affairs, 84 percent of all parents reported keen interest. Of the parents at School B, 96.4 percent expressed keen interest, 88.5 percent of the parents at School A, 78.2 percent of parents at School D and 72.8 percent of parents at School C reported similar interest.

Almost 64 percent of all parents questioned reported that they had made more than one visit to the school to discuss their children's educational progress. However, 36.1 percent of parents reported they had made no visits at all to the school during the year. The question of formal parent-teacher interviews in these schools was not raised during this study. In School B, 93 percent of the parents reported more than one visit to the school, 65.9 percent of parents at

Table 5

Formal Education of Parents and Type of Employment Pursued
(Rounded Percent - By School)

	Type of Employment	Years of Formal Education					
		Under 6	7 - 9	10 - 12	13 - 15	16 or more	Total
School A	Managerial	2.9	11.4	5.7			20.0
	Skilled	8.6	22.9	11.4			42.9
N = 35	Semi Skilled		11.4	5.7	5.7		22.8
	Unskilled		14.3				14.3
School B	Managerial	1.8	42.1	15.8			59.7
	Skilled		14.0	1.8			15.8
N = 57	Semi Skilled		12.3	1.8			14.1
	Unskilled		3.4	7.0			10.4
School C	Managerial	1.1	4.5	13.6	3.4	1.1	23.7
	Skilled	5.7	14.8	8.1	1.1		29.7
N = 88	Semi Skilled	6.8	10.2	5.8	1.1		23.9
	Unskilled	1.1	18.2	3.4			22.7
School D	Managerial	2.5	12.2	9.6	4.1	3.6	32.3
	Skilled	0.5	19.8	10.2	1.0	0.5	32.0
N = 197	Semi Skilled	2.0	16.2	6.0	0.5		24.7
	Unskilled	2.5	5.0	3.0	0.5		11.0

Total = 100 percent

School C reported in similar manner, while 57.2 percent and 39.6 percent of parents in Schools A and D, respectively, reported more than one visit to the school during the year. Parents expressed varying levels of satisfaction and uncertainty regarding the outcomes of their visits to the school. In School B, 80.7 percent of parents expressed satisfaction and 10.5 percent expressed uncertainty at the outcomes of their visits. In School C, parents' responses were in the order of 72.7 percent and 18.2 percent, in School D, 65.7 percent and 27.9 percent, and in School A, 65.7 percent and 22.9 percent.

Additional data on parent responses are reported in this chapter in combination with data derived from the responses of students and teachers to the same questions. The following section of this chapter is devoted to the responses of teachers to the questions relating to personal and demographic characteristics.

THE TEACHERS

Teacher response to this study represented 89.9 percent of the teachers employed in the four schools. All teachers in Schools A, B and C participated in the study while 80 percent of the teachers employed in School D took part. Overall, the sex ratio of teachers who responded to the study was slightly more than 2:1 in favor of male teachers. In School A the ratio of male to female teachers was 3:1, in School B, 1:1, in School C, 6:1, and in School D, of those teachers who responded, the ratio was 1.8:1.

The median age of teachers who responded to the study fell between the 30 - 39 and the 40 - 49 year categories. In Schools A and C, 58.3 percent of the teachers were in the 40 to 60 years and over categories, while in Schools B and D, the majority of teachers were under 40 years of age. The amount of teacher education which teachers had completed ranged from the 1 - 2 years category to the 6 - 9 years category, with 79.6 percent of all teachers having completed 3 - 5 years of teacher education. Just as the age of teachers in the four schools varied, so did the amount of teacher education which teachers had completed. An analysis of the ages of all teachers and the extent of their teacher education for each of the four schools is given in Table 6.

The majority of teachers who responded to this study seemed to have gained a good deal of their teaching experience in the County of St. Paul. The years of teaching experience and the years of teaching in the County coincided for 61.7 percent of the teachers in the study. In School B, 50 percent of the teachers had gained all their teaching experience in the County. In School D the proportion of teachers in this category was 57 percent, in School A it was 66.7 percent and in School C it was 75 percent. In keeping with these data, 81 percent of the teachers in the study had grown up in the Province of Alberta, while 35.2 percent of all teachers had grown up in the County of St. Paul. Data on the years of teaching experience, and years of teaching in the County are illustrated in Table 7.

Teachers were also asked to state the number of years they had lived in the area and to indicate whether or not they planned to move in the foreseeable future. Of all teachers in the study, almost 63 percent had lived in the area for more than six years and, of this number of teachers, 41 percent stated their intention to live in the area permanently. While 16 percent of those teachers who had lived in the area for more than 6 years expressed uncertainty about their future

Table 6

Age, Teacher Education and Sex of Teachers in St. Paul County
(Rounded Percent - By School)

	Teacher Education	Age of Teachers 21 - 29	30 - 39	40 - 49	50 - 59	60 or over	Teacher Response Data
School A	1 - 2 years		8.3			8.3	Teachers Employed 12
	3 - 5 years	8.3	16.8	25.0	8.3	8.3	Teacher Response 12
N = 12	6 - 9 years	8.3			8.4		Percent Response 100
	10 -15 years						Sex Distribution
	16 or more						Male 75 Female 25
School B	1 - 2 years					10.0	Teachers Employed 10
	3 - 5 years	40.0	20.0	20.0			Teacher Response 10
N = 10	6 - 9 years			10.0			Percent Response 100
	10 -15 years						Sex Distribution
	16 or more						Male 50 Female 50
School C	1 - 2 years						Teachers Employed 12
	3 - 5 years	25.0	16.7	16.7	33.3	8.3	Teacher Response 12
N = 12	6 - 9 years						Percent Response 100
	10 -15 years						Sex Distribution
	16 or more						Male 83.3 Female 16.7
School D	1 - 2 years	7.1					Teachers Employed 35
	3 - 5 years	17.9	25.0	21.5	7.1		Teacher Response 28
N = 28	6 - 9 years	3.6	3.6	7.1		7.1	Percent Response 80
	10 -15 years						Sex Distribution
	16 or more				Total = 100 percent		Male 64.3 Female 35.7

Table 7

Experience of Teachers and Years of Teaching in St. Paul County
(Rounded Percent - By School)

	Years of Teaching in County	Total Years of Teaching Experience 1 - 2	3 - 5	6 - 9	10 - 15	16 or more
School A	1 - 2					
N = 12	3 - 5		8.3		8.3	
	6 - 9			16.8	25.0	
	10 -15				8.3	
	16 or more					33.3
School B	1 - 2	20.0		10.0		10.0
N = 10	3 - 5		20.0			10.0
	6 - 9			10.0		
	10 -15					20.0
	16 or more					
School C	1 - 2	25.0				
N = 12	3 - 5		8.4			8.3
	6 - 9			25.0	8.3	
	10 -15				8.3	8.4
	16 or more					8.3
School D	1 - 2	17.8	3.6	3.6	3.6	
N = 28	3 - 5		7.1	7.1	3.6	3.6
	6 - 9			3.6	3.6	3.6
	10 -15				7.1	10.7
	16 or more					21.4

Total = 100 percent

plans, only 5.5 percent of the long-term residents indicated their intention to move. A similar pattern was reflected among teachers who had lived in the area five years or less. Of this group, 64 percent stated their intention to live in the area permanently, 23.9 percent indicated uncertainty about their future plans, while only seven percent indicated their intention to move.

As might be expected of people who had lived for so long in the one area, and who had been involved closely with the schools, 93 percent of all teachers indicated a considerable interest in High School/Community Activities, while the remaining seven percent were uncertain about the extent of their interest. Similarly, more than 88 percent of all teachers were on visiting terms with more than 3 to 4 people in the community, while more than 71 percent of all teachers were on visiting terms with 7 or more people in the community.

It was assumed that teachers who had been part of the community for so long, who were interested in High School/Community Affairs, and who counted parents as their friends would be able to judge the extent of community knowledge about the school. When questioned on their satisfaction "with the amount of information the local community appeared to have about the High School", teachers in the four schools responded in different manners. Their responses ranged from a high level of satisfaction with the information available to the community to responses which indicated strong dissatisfaction. This response was unanticipated in the planning stages of the study and no provision was made to analyse the reasons underlying the dissatisfaction expressed by almost 25 percent of all teachers. Responses of teachers to this question are presented in Table 8.

Table 8

Satisfaction with Amount of Information About the Local High School
Available to the Local Community - As Perceived by Teachers
(Rounded Percent - By School)

	Satisfied to Very Satisfied	Uncertain	Not Satisfied to Not at all Satisfied
School A			
Teachers = 12	83.3	16.7	----
School B			
Teachers = 10	50.0	20.0	30.0
School C			
Teachers = 12	41.6	25.0	33.4
School D			
Teachers = 28	39.3	25.0	35.7

Total = 100 percent

Teachers participating in this study were asked to respond to instruments which measured their perceptions of conditions in the schools and which measured the level of teacher morale. Data derived by these means are discussed fully in Chapter 5.

The data presented earlier referred specifically to the responses of parents, students and teachers and were kept separate to illustrate more clearly the characteristics of each group. The following section merges the responses of each group on matters of joint concern to demonstrate more effectively those areas in which the views of the three groups diverged on matters of common concern.

PARENTS, STUDENTS AND TEACHERS

In the preceding section teachers reported their satisfaction with the amount of information the community had about the high school. Parents and students were asked similar questions and their responses tabulated. The two data, which have been combined in Table 9 to facilitate comparison, indicate that 25.6 percent of all parents, 20.1 percent of all students and 24.8 percent of all teachers were dissatisfied with the amount of information the community had about the high school.

When parents, students and teachers were asked how they perceived most of the information about the local high school to be disseminated, all respondents were in reasonable agreement. In general terms, it was agreed that most of the information was disseminated by students and the teachers. However, different groups in the four schools varied in the way they gave credit for the dissemination of information. In School B, for example, parents and students saw the teachers as being

Table 9

Satisfaction with Amount of Information About the Local High School Available to Parents - As Perceived by Parents and Students
(Rounded Percent - By School)

		Satisfied to Very Satisfied	Uncertain	Not Satisfied to Not at all Satisfied
School A	Parents = 35	60.1	17.1	30.8
	Students = 39	56.4	30.8	12.8
	*Teachers = 12	83.3	16.7	----
School B	Parents = 57	73.6	3.5	22.9
	Students = 62	60.3	25.4	14.3
	*Teachers = 10	50.0	20.0	30.0
School C	Parents = 88	56.9	22.7	20.4
	Students = 95	56.9	22.1	21.3
	*Teachers = 12	41.6	25.0	33.4
School D	Parents =197	42.6	28.9	28.3
	Students =226	47.3	20.8	31.9
	*Teachers = 28	39.3	25.0	35.7

Total = 100 percent

*Data transferred from Table 8 for ease of comparison.

far more important in the communications process than the teachers claimed. This situation was quite different in the remaining three schools where teachers saw themselves occupying a far more important role in the pattern of communications than the parents or students were prepared to accord them. Full details of the responses of parents, students and teachers to this question are given in Table 10.

Parents, students and teachers were each asked to state their views on the desirability of teachers living and teaching in the same community. The majority of respondents in all groups thought the proposal highly desirable with only a small percentage of each group holding contrary views. In the overall view, 78.3 percent of all parents favored the proposal while 4.7 percent opposed it; 72.9 percent of students supported and 5.9 percent opposed the proposal; while 77.5 percent of teachers supported and 6.8 percent opposed the view that teachers should live and teach in the same community. Since the views expressed reflected community attitudes towards the acceptance of teachers and their integration into the community, they were relevant to this study as possible influences affecting the level of teacher morale. Full details of the responses of each group to this question are given in Table 11.

In response to the question, "How many of the teachers at the local high school do you know well enough to visit socially?" parents and students claimed varying amounts of social contact with teachers. In general terms, 36 percent of all parents knew no teachers well enough to visit them socially, while 36.9 percent of students made similar claims. The degree of similarity between the responses of students and parents was not surprising since both shared the same home environment

Table 10

Sources of Information for Parents on Local High School Matters - As Perceived by Parents, Students and Teachers (Rounded Percent - By School)

		News Media	Principal and Teachers	Other School Employees	Students	Neighbours
School A	Parents = 35	2.9	11.4	----	85.7	----
	Students = 39	5.1	20.5	----	71.8	2.6
	Teachers = 12	----	41.7	8.3	50.0	----
School B	Parents = 57	8.8	36.8	----	47.4	7.0
	Students = 62	6.3	20.6	----	69.8	3.3
	Teachers = 10	----	10.0	----	90.0	----
School C	Parents = 88	1.1	13.6	2.3	83.0	----
	Students = 95	5.3	14.7	1.1	74.7	4.2
	Teachers = 12	----	25.0	----	75.0	----
School D	Parents =197	9.6	7.1	4.1	75.6	3.6
	Students =226	9.3	7.1	1.8	77.4	4.4
	Teachers = 28	10.7	10.7	----	78.6	----

Total = 100 percent

Table 11

The Desirability of Teachers Living and Teaching in the Same Community As Perceived by Parents, Students and Teachers (Rounded Percent - By School)

		Desirable to Very Desirable	Uncertain	Not Desirable to Not at all Desirable
School A	Parents N = 35	82.9	17.1	----
	Students N = 39	69.2	20.5	10.3
	Teachers N = 12	75.0	16.7	8.3
School B	Parents N = 57	77.2	17.5	5.3
	Students N = 62	73.1	25.4	1.5
	Teachers N = 10	80.0	20.0	----
School C	Parents N = 88	72.7	17.5	5.3
	Students N = 95	70.5	22.1	7.4
	Teachers N = 12	83.3	8.3	8.4
School D	Parents N =197	80.2	11.7	8.1
	Students N =226	78.7	16.8	4.5
	Teachers N = 28	71.5	17.9	10.6

Total = 100 percent

where, presumably, the bulk of social contact with friends occurred. Because the variations in the degree of social contact reflected in each of the schools are an important guide to the level of social acceptance and integration into the community, the responses of parents, students and teachers to this question are included in Table 12.

All respondents were asked to indicate the extent of their participation in four types of community activity. These were the social activities, sporting activities, service activities and church activities of the community. The responses to these questions indicated the extent of teacher participation in community activities and illustrated the opportunities which existed for social interaction with members of the community in activities unrelated to the school. In some cases, teacher participation in the activities was wholehearted, and may have provided leadership in the community, in other cases their participation was less enthusiastic. But the extent of participation demonstrated the extent to which teacher/community interaction was possible outside the normal role relationship imposed by the school. Details of these responses are presented in Table 13.

All participants in this study were asked to respond to the Student Satisfaction Scale to indicate the extent to which they perceived the conditions in the school to be conducive to the growth of student satisfaction. The data derived from the use of this instrument formed a major part of this study and was subjected to extensive statistical analysis. For this reason it was more appropriate to consider the data derived as a result of the Student Satisfaction Scale in Chapter 5 which presents an analysis of the data.

Table 12

Number of Teachers Known Well Enough to Visit Socially
As Reported by Parents and Students
(Rounded Percent - By School)

		None	1 - 2	3 - 4	5 - 6	7 or more
School A	Parents = 35	37.1	40.0	8.6	11.4	2.9
	Students = 39	51.3	30.8	12.8	5.1	----
	*Teachers = 12	----	----	16.7	8.3	75.0
School B	Parents = 57	24.6	14.0	24.6	22.8	14.0
	Students = 62	17.5	38.1	15.8	17.5	11.1
	*Teachers = 10	20.0	----	10.0	----	70.0
School C	Parents = 88	43.2	27.3	12.5	10.2	6.8
	Students = 95	37.9	35.8	16.8	4.2	5.3
	*Teachers = 12	16.7	----	8.3	----	75.0
School D	Parents =197	39.1	28.4	10.7	9.1	12.7
	Students =226	40.7	35.4	14.2	3.5	6.2
	*Teachers = 28	10.7	----	3.6	21.4	64.3

Total = 100 percent

* Teacher responses report the number of parents known well enough to visit socially.

Table 13

Participation by Parents, Students and Teachers in Community Activities
(Rounded Percent - By School)

	SOCIAL ACTIVITIES		SPORTING ACTIVITIES		SERVICE ACTIVITIES		CHURCH ACTIVITIES	
	Active to Very Active	No Activity	Active to Very Active	No Activity	Active to Very Active	No Activity	Active to Very Active	No Activity
School A								
Parents N = 35	80.0	20.0	34.3	65.7	68.6	31.4	48.6	51.4
Students N = 39	87.2	12.8	79.5	20.5	46.2	53.8	15.4	84.6
Teachers N = 12	100.0	----	66.6	33.4	100.0	----	25.0	75.0
School B								
Parents N = 57	87.7	12.3	54.4	45.6	84.2	15.8	96.5	3.5
Students N = 62	92.0	8.0	76.2	23.8	85.7	14.3	84.1	15.9
Teachers N = 10	70.0	30.0	70.0	30.0	60.0	40.0	70.0	30.0
School C								
Parents N = 88	78.4	21.6	47.7	52.3	63.6	36.4	53.4	46.4
Students N = 95	87.4	12.6	76.9	23.1	65.3	34.7	29.5	70.5
Teachers N = 12	100.0	----	91.7	8.3	75.0	25.0	66.7	33.3
School D								
Parents N =197	68.5	31.5	44.7	55.3	64.5	35.5	75.1	24.9
Students N =226	70.8	29.2	58.8	41.2	49.6	50.4	43.4	56.6
Teachers N = 28	89.3	10.7	78.0	25.0	75.0	25.0	50.0	50.0

Total = 100 percent

This chapter presented a social, demographic and educational profile of the participants in the study and tabulated some of their responses as a basis for further comparison. More detailed analysis of the data is contained in the following chapter.

CHAPTER V

ANALYSIS OF THE DATA

Introduction

The presentation of data in this chapter, and the subsequent statistical analysis, follows the order established in the statement of the problem outlined in Chapter I.

This study investigated four major problems. The first of these examined the perceptions of the school held by students, parents and teachers and the relationships that existed between the views of the three groups. The second problem investigated the morale of teachers and the relationship that existed between teacher morale and the perceptions of the school held by students, parents and teachers. The third problem examined the factors in the school and in the personal background of teachers which may have influenced the level of teacher morale. The fourth problem examined the factors in the school and in the personal background of students which may have influenced the level of student satisfaction. It also investigated the personal characteristics of students, and the parents of those students, who displayed high levels of student satisfaction. The second aspect of this problem sought to define the personal characteristics of those students who demonstrated low levels of student satisfaction, together with the personal characteristics of their parents.

PERCEPTIONS OF THE SCHOOL

Throughout this chapter the term "perceptions of the school" has been used as an abbreviation to refer to the perceptions held by parents, students and teachers of the extent to which conditions in the schools encouraged the growth of student satisfaction. In this study, student satisfaction was defined as the extent to which the school was perceived by students as fulfilling their expectations for personal, academic and social development, and the extent to which it provided opportunities and experiences congruent with students' goal aspirations.

Perceptions of the school varied according to the nature and extent of the individual's involvement with the school. Students were directly involved in the school and their experiences were reflected in their scores on student satisfaction. Parents were external to the school but were interested observers nonetheless. Their perceptions of the school reflected information and attitudes gathered from others as well as their own assessment of the extent to which the school provided a satisfying and worthwhile experience for students. Teachers were involved in the school as employees and, in this sense, manipulated the environment in which the students were educated. Their perceptions of the school were tinged with elements of their economic and career involvement with the school as well as by their concerns as educators to provide students with the personal, academic and social opportunities required to help them to achieve their goal aspirations. The Student Satisfaction Scale, therefore, measured the perceptions which three groups of people held of a central object with which they are all associated to varying degrees.

Statistical Considerations

At the outset it was anticipated that analysis of the relationships within each school would be possible with the canonical correlation technique. However, the use of the "classroom" as a unit of comparison reduced the sample size to a level where the use of the canonical correlation within schools was inappropriate. Because of the sensitivity of the technique to small numbers, and to the possibility of linear dependencies between data, responses from all schools were merged to yield a sample of 62 cases. The Pearson Product Moment Correlation technique was used to preserve the individuality of the schools and to investigate the six sub-problems contained in Problems 1 and 2 of this study so as to demonstrate the nature of the relationships within them. The data so gained was used to supplement that gained through the use of the canonical correlation.

The values of all Pearson Product Moment Correlations were presented to illustrate the nature and extent of the inter-correlations present. The correlation matrix for all schools, calculated as part of the canonical correlation process, presented only those correlations which equalled or exceeded the level of significance p = .05, but indicated the direction of all correlation values. The data were presented in this manner to provide greater clarity and insight into the relationships measured.

The scores achieved by parents, students and teachers were relevant to this section of the chapter. Table 14 reports the mean scores of the respondents in each school on the Total and Factor Scores

Table 14

Means of the Total and Factor Scores on Student Satisfaction Scale
for Parents, Students and Teachers - By School
(Standard Deviations in Brackets)

		Total Score	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
School A	Parents N = 35	114.1 (14.6)	34.8 (5.2)	23.9 (4.6)	22.6 (4.4)	26.4 (3.7)	6.5 (1.2)
	Students N = 39	113.3 (16.2)	33.5 (5.7)	23.3 (4.0)	23.2 (5.0)	26.8 (4.0)	6.4 (1.1)
	Teachers N = 12	134.9 (9.4)	41.4 (3.4)	27.3 (2.9)	28.7 (1.5)	30.3 (3.7)	7.2 (0.7)
School B	Parents N = 57	129.2 (10.4)	39.8 (3.7)	26.4 (3.2)	25.9 (2.7)	29.9 (3.5)	7.2 (0.9)
	Students N = 62	125.3 (11.5)	37.8 (4.2)	25.6 (3.3)	25.5 (2.9)	29.7 (3.3)	6.8 (1.1)
	Teachers N = 10	127.4 (11.1)	38.9 (3.2)	25.3 (3.1)	25.9 (2.5)	30.2 (2.9)	7.1 (0.7)
School C	Parents N = 88	109.1 (14.7)	32.9 (5.3)	23.4 (4.0)	21.7 (3.7)	24.8 (4.3)	6.2 (1.2)
	Students N = 95	103.8 (15.9)	30.7 (6.0)	22.1 (4.0)	20.4 (4.2)	24.7 (4.0)	5.9 (1.4)
	Teachers N = 12	131.3 (14.1)	40.2 (3.8)	27.1 (2.5)	26.7 (4.6)	30.3 (4.4)	7.2 (0.7)
School D	Parents N =197	115.8 (14.9)	34.8 (5.4)	24.4 (3.8)	23.2 (3.6)	27.0 (4.2)	6.2 (1.2)
	Students N =226	116.8 (13.7)	34.5 (5.1)	24.3 (3.5)	23.5 (3.5)	24.3 (3.6)	6.1 (1.3)
	Teachers N = 28	125.3 (9.2)	37.5 (3.3)	24.9 (2.4)	25.8 (2.7)	29.9 (2.4)	7.1 (0.8)

Note: In this table and all subsequent tables item total scores are used.

of the Student Satisfaction Scale. These data serve to supplement the statistical analysis performed in this chapter.

Figure 2 presents a summary of factor descriptions. A more detailed description was presented in Chapter 3.

Figure 2

Factor Descriptions for Student Satisfaction

Factor 1.	Personal Relationships within the School
Factor 2.	Institutional Aspects of the School
Factor 3.	Supervisory Attitude of Teachers
Factor 4.	Instructional Atmosphere of the School
Factor 5.	Student Identity. The desire to be treated as a person.

An examination of the data related to the three aspects of Problem 1 follows.

Problem 1.1

> "What is the relationship between Student Satisfaction and Parent Perception?"

The relationship between the factor scores of students and parents on the Student Satisfaction Scale for Schools A through D respectively is presented in Tables 15 through 18. Tables 19 and 20 demonstrate the inter-correlation matrix and the canonical correlations for all schools.

The degree of relationship between Student Satisfaction and Parent Perception varied for each school. There were numerous positive relationships in the four schools which equalled or exceeded the required level of significance, p = .05, and a number of correlations which were

Table 15

Pearson R Correlation Between Factor Scores of Student Satisfaction and Parent Perception
School A N = 12

	Student Satisfaction Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.810	.903	.920	.496	.255	.091	.070	.384	-.214
2			.898	.779	.782	.477	.587	.458	.751	.241
3				.800	.729	.320	.309	.428	.666	.094
4					.443	.121	.070	-.070	.390	-.308
5						.444	.589	.715	.883	.378
6							.807	.602	.593	.610
7								.723	.759	.793
8									.823	.702
9										.575
10										1.000

Approximate values of r and p

.575 = .05
.702 = .01
.751 = .005
.793 = .002

Table 16

Pearson R Correlation Between Factor Scores of Student Satisfaction and Parent Perception
School B N = 10

	Student Satisfaction Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.863	.691	.905	.628	.723	.601	.525	.792	.524
2			.317	.797	.603	.435	.474	.235	.566	.629
3				.759	.496	.749	.669	.827	.546	.035
4					.719	.707	.795	.724	.628	.377
5						.177	.869	.682	.091	.124
6							.445	.568	.883	.513
7								.902	.230	.103
8									.279	-.082
9										.602
10										1.000

Approximate values of

r and p

.628 = .05
.759 = .01
.797 = .005
.839 = .002

Table 17

Pearson R Correlation Between Factor Scores of Student Satisfaction and Parent Perception
School C N = 12

	Student Satisfaction Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.905	.911	.339	.652	-.073	-.083	.553	.311	.208
2			.923	.627	.738	.082	.126	.667	.431	.336
3				.374	.606	-.113	-.096	.555	.262	.155
4					.783	.617	.653	.755	.706	.624
5						.659	.619	.953	.876	.745
6							.963	.714	.893	.693
7								.665	.843	.635
8									.902	.783
9										.772
10										1.000

Approximate values of

r and p

.588 = .05

.706 = .01

.743 = .005

.779 = .002

Table 18

Pearson R Correlation Between Factor Scores of Student Satisfaction and Parent Perception
School D N = 28

	Student Satisfaction Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.757	.519	.742	.666	.369	.435	.181	.508	.282
2			.388	.760	.522	.281	.293	.046	.341	.180
3				.477	.229	.784	.691	.743	.846	-.382
4					.483	.327	.277	.072	.391	.357
5						-.057	.025	-.199	.046	.514
6							.886	.922	.867	-.401
7								.867	.845	-.314
8									.820	-.535
9										-.430
10										1.000

Approximate values of r and p

.382 = .05
.477 = .01
.514 = .005
.550 = .002

Table 19

Correlation Between Factor Scores of Student Satisfaction and Parent Perception-for all Schools N = 62

	Student Satisfaction					Parent Perception				
	Factors 1 - 5					Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.915	.893	.899	.782	.731	.694	.646	.850	.598
2			.833	.919	.737	.609	.662	.568	.766	.480
3				.830	.701	.739	.662	.737	.867	.393
4					.663	.622	.623	.532	.778	.460
5						.629	.644	.557	.678	.727
6							.888	.910	.917	.577
7								.894	.856	.532
8									.875	.410
9										.510
10										1.000

Approximate values of

r and p

* = N.S
.249 = .05
.321 = .01
.352 = .005
.384 = .002

Table 20

Canonical Correlation Between Each Pair of New Composites
Student Satisfaction Factors - Parents Perception Factors
for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.910	191.548	25	.000
2 - 5	0.805	91.995	16	.000
3 - 5	0.564	33.035	9	.000
4 - 5	0.428	11.411	4	.022
5 - 5	0.007	0.003	1	.951

close to significance. In three schools some negative correlations were recorded but only one of these achieved statistical significance. In general, a substantial level of agreement existed between the perceptions of the school held by students and those held by their parents. When the relationships between the responses of students and parents were plotted for all schools, it was found that matching and significant correlations had been achieved on each of the five factors. Further, 84 percent of the cells in the inter-correlation matrix were occupied by values which were statistically significant. A number of the cells of the matrix were occupied by significant correlations from two or more schools. These data reflected the substantial agreement that existed between parents and students on their perceptions of the school. These data are illustrated in Figure 3.

Figure 3

Distribution of Significant Correlations:
Student Satisfaction and Parent Perception in all Schools

		Parent Perception				
Factors		1	2	3	4	5
Student Satisfaction	1	B			B	
	2		A	C	A	B
	3	B D	B D	B D	A D	D
	4	B C	B C	B C	B C	C
	5	C	A B C	A B C	A C	C

D = negative correlation

In terms of the significant correlations recorded, parents and students in School B were closer together in their views of the school than were parents and students in other schools. Parents and students at Schools C, D and A followed in descending order of significant correlations.

The correlation matrix presented in Table 19 reflected the high degree of relationship between the views of parents and those of the students. When the responses of parents and students from all schools were combined no negative correlations were recorded, and all of the values were of significant magnitude to achieve statistical significance at the level p = .05.

The degree of correlation which existed between the clusters of factor scores was reported in Table 20. The canonical correlation between the pairs of composites derived from the factor scores on Student Satisfaction and Parent Perception demonstrated a high degree of positive relationship on four of the pairs of composites.[1] These ranged from Rc = 0.910 between composites 1 - 5 to Rc = 0.428 between composites 4 - 5. These four correlations were significant beyond the level p = .02. The remaining correlation was not significant. These correlations reflected the degree of agreement which existed between the views of the parents and those of the students concerning the conditions in the school and their potential for providing an educational experience satisfying to students. The degree of agreement between the views of parents and students was demonstrated in Table 14, where parents and students of School B achieved the highest mean score for all parents and students on the total and five factor scores of the Student Satisfaction Scale. In rank order, Schools D, A, and C followed, with parents and students maintaining approximately the same rank order in all cases.

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[1] "The term "composite" has been used to refer to the linear composite or weighted average, which reflected the canonical weights assigned to each of the variables in the canonical correlation process. The first canonical correlate was the highest correlation between the weighted composite of X variables and the weighted composite of Y variables. The second canonical correlate was the highest correlation that could be found between X and Y weighted composites, which were not correlated to the first canonical variates. Additional canonical correlations were derived in a similar manner. (Darlington, 1973)

Problem 1.2

> "What is the relationship between Teacher Perception and Student Satisfaction?"

The relationship between the perceptions of the school held by students and teachers is demonstrated in Tables 21 through 24, which relate to Schools A through D respectively. Tables 25 and 26 demonstrate the relationships which existed in all schools between the average perception scores of students and those of their teachers.

The degree of relationship between Student Satisfaction and Teacher Perception varied for each school and indicated that students and teachers perceived the school in which they interacted in quite a different manner. There were indications that some divergence of views of the school existed between teachers and students in some schools. While positive correlations were recorded in Schools A, B and C, 72 percent of the correlations recorded in School D were negative in direction but not of sufficient magnitude to achieve statistical significance. Such findings, while carrying little statistical weight, are important to school administrators by revealing potential disharmony between teachers and students.

The number of positive correlations which achieved the level

Table 21

Pearson R Correlation Between Factor Scores of Teacher
Perception and Student Satisfaction
School A N = 12

	Teacher Perception Factors 1 - 5					Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.609	.732	.222	.720	-.242	-.001	.005	-.085	.146
2			.710	.443	.618	.109	.312	.361	.201	.453
3				.335	.563	.041	.187	.219	.245	.096
4					.252	.466	.606	.561	.392	.507
5						-.119	.014	.118	-.053	.265
6							.810	.903	.920	.496
7								.898	.779	.782
8									.800	.729
9										.443
10										1.000

Approximate values of r and p

.563 = .05
.710 = .01
.750 = .005
.800 = .002

Table 22

Pearson R Correlation Between Factor Scores of Teacher Perception and Student Satisfaction
School B N = 10

	Teacher Perception Factors 1 - 5					Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.896	.749	.786	.715	.164	.048	.432	.212	.275
2			.747	.723	.813	.292	.224	.353	.290	.322
3				.643	.425	.475	.200	.662	.372	.478
4					.509	.001	-.136	.141	-.128	.076
5						.361	.432	.251	.344	.141
6							.863	.691	.905	.628
7								.317	.797	.603
8									.759	.496
9										.719
10										1.000

Approximate values of

r and p

.628 = .05

.759 = .01

.805 = .005

.843 = .002

Table 23

Pearson R Correlation Between Factor Scores of Teacher Perception and Student Satisfaction
School C N = 12

	Teacher Perception Factors 1 = 5					Student Satisfaction Factors 1 = 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.546	.809	.792	.385	.409	.206	.328	-.008	.265
2			.819	.641	.402	.405	.454	.307	.621	.779
3				.875	.407	.263	.217	.187	.315	.469
4					.072	.332	.238	.296	.200	.401
5						-.064	-.122	-.136	-.014	.246
6							.905	.911	.339	.652
7								.932	.627	.738
8									.374	.606
9										.733
10										1.000

Approximate values of

r and p

.580 = .05

.670 = .01

.740 = .005

.792 = .002

Table 24

Pearson R Correlation Between Factor Scores of Teacher Perception and Student Satisfaction
School D N = 28

	Teacher Perception Factors 1 - 5					Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.595	.723	.448	.491	-.024	-.156	-.063	.099	.030
2			.569	.521	.342	-.162	-.153	-.143	-.022	-.306
3				.477	.317	-.043	-.166	.144	.107	-.142
4					.069	-.042	-.174	-.014	-.002	-.286
5						.011	.087	-.026	-.041	.131
6							.757	.519	.742	.666
7								.388	.760	.522
8									.477	.229
9										.483
10										1.000

Approximate values of

r and p

.390 = .05

.480 = .01

.520 = .005

.570 = .002

Table 25

Correlation Between Factor Scores of Student Satisfaction and Teacher Perception-for all Schools N = 62

	Student Satisfaction Factors 1 - 5					Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.915	.893	.899	.782	- *	- *	- *	*	*
2			.833	.919	.737	- *	- *	- *	*	*
3				.830	.701	- *	- *	*	*	- *
4					.663	- *	- *	- *	*	- *
5						*	*	*	*	*
6							.687	.753	.512	.495
7								.666	.529	.457
8									.593	.343
9										*
10										1.000

Approximate values for

r and p

* = N.S.
.249 = .05
.321 = .01
.352 = .005
.384 = .002

Table 26

Canonical Correlation Between Each Pair of New Composites
Student Satisfaction Factors - Teacher Perception Factors
for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.524	32.841	25	.131
2 - 5	0.350	14.712	16	.540
3 - 5	0.267	7.321	9	.598
4 - 5	0.211	3.145	4	.535
5 - 5	0.100	0.571	1	.453

of significance p = .05 was considerably smaller than that achieved between students and parents. Only five significant correlations were recorded between the perceptions of students and teachers in the four schools. The distribution of the significant correlations are illustrated in Figure 4.

Figure 4

Distribution of Significant Correlations
Student Satisfaction and Teacher Perception in all Schools

	Teacher Perception				
Student Satisfaction Factors	1	2	3	4	5
1					
2				A	
3			B	A	
4		C			
5		C			

It is difficult to account for the frequency of the negative correlation recorded by students in School D. No data obtained in this study provided conclusive evidence. The possibility that the response may have resulted from the adverse reactions of the Indian and Metis students in the school was offset by the reality that, while 10.8 percent of the student population at School D was composed of Indian or Metis students, at School A - where Indian and Metis students comprised 67.2 percent of the student population - a far smaller number of non-significant negative correlations were recorded. The possibility remained, however, that the negative responses recorded were genuine expressions of student dissatisfaction with this particular school.

The correlation matrix presented in Table 25 reflected the lack of agreement existing between the perceptions of students and teachers. No significant correlations were recorded and 52 percent of the correlations based on responses from all schools were negative in direction. The canonical correlations calculated between the pairs of composites derived from the factor scores on Student Satisfaction and Teacher Perception reflected the same lack of agreement. None of the canonical correlations were of sufficient magnitude to achieve statistical significance at the level $p = .05$.

On the basis of these data, it seemed evident that teachers and students in three schools agreed to some extent on their perceptions of the school. In the fourth school students and teachers seemed to hold divergent views on the school as a satisfying educational experience.

Problem 1.3

> "What is the relationship between Parent Perception and Teacher Perception?"

The relationship between the perceptions of the school held by parents and teachers is demonstrated in Tables 27 through 30, which relate to the responses recorded in Schools A through D respectively. Tables 31 and 32 demonstrate the relationship which existed in all schools between the perceptions of parents and those of teachers.

Although 85 percent of all correlations recorded between the perceptions of teachers and those of parents were positive, only five percent of them were of sufficient magnitude to exceed the required

Table 27

Pearson R Correlation Between Factor Scores of Teacher
Perception and Parent Perception
School A N = 12

	Teacher Perception Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.609	.732	.222	.720	-.095	.140	.369	.375	.205
2			.710	.443	.618	-.298	.067	.317	.445	.017
3				.335	.563	-.365	.021	.063	.245	.012
4					.252	-.046	.163	.274	.313	.011
5						-.125	.049	.318	.385	.259
6							.807	.602	.593	.610
7								.723	.759	.793
8									.823	.702
9										.575
10										1.000

Approximate values of

r and p

.575 = .05

.700 = .01

.760 = .005

.790 = .002

Table 28

Pearson R Correlation Between Factor Scores of Teacher
Perception and Parent Perception
School B N = 10

	Teacher Perception Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.896	.749	.786	.715	.002	.276	.296	-.085	-.068
2			.747	.723	.813	.070	.369	.277	.089	.099
3				.643	.425	.285	.446	.438	.254	.070
4					.509	-.080	.012	.063	-.085	.102
5						.131	.187	.122	.187	.201
6							.445	.568	.883	.513
7								.902	.230	.103
8									.279	-.082
9										.602
10										1.000

Approximate values of

r and p

.645 = .05

.750 = .01

.795 = .005

.845 = .002

Table 29

Pearson R Correlation Between Factor Scores of Teacher
Perception and Parent Perception
School C N = 12

	Teacher Perception Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.546	.809	.792	.385	-.042	-.209	.196	.117	.088
2			.819	.641	.402	.607	.558	.685	.752	.651
3				.875	.407	.309	.155	.397	.471	.437
4					.072	.250	.091	.403	.468	.344
5						.231	.145	.088	.133	.324
6							.963	.714	.893	.693
7								.665	.843	.635
8									.902	.783
9										.772
10										1.000

Approximate values of

r and p

.560 = .05

.695 = .01

.750 = .005

.790 = .002

Table 30

Pearson R Correlation Between Factor Scores of Teacher Perception and Parent Perception
School D N = 28

	Teacher Perception Factors 1 - 5					Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.595	.723	.448	.491	.003	-.146	-.058	-.037	.323
2			.569	.521	.342	.191	.096	.175	.148	.047
3				.477	.317	.090	-.071	.063	.145	.056
4					.069	.094	-.039	.086	.090	.044
5						.098	.073	.052	.078	.117
6							.886	.922	.867	-.401
7								.867	.845	-.314
8									.820	-.535
9										-.430
10										1.000

Approximate values of
[illegible] and p
.395 = .05
.475 = .01
.520 = .005
.570 = .002

Table 31

Correlation Between Factor Scores of Parent Perception and Teacher Perception-for all Schools N = 62

	Parent Perception Factors 1 - 5					Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10
1	1.000	.888	.910	.917	.577	- *	- *	*	*	*
2			.894	.856	.532	- *	- *	- *	*	*
3				.875	.410	- *	*	- *	*	*
4					.510	- *	- *	*	*	*
5						*	*	*	*	*
6							.687	.753	.512	.495
7								.666	.529	.457
8									.593	.343
9										*
10										1.000

Approximate values for

r and p

* = N.S.
.249 = .05
.321 = .01
.352 = .005
.384 = .002

Table 32

Canonical Correlation Between Each Pair of New Composites
Parent Perception Factors - Teacher Perception Factors
for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.514	29.701	25	.234
2 - 5	0.360	12.396	16	.719
3 - 5	0.233	4.530	9	.876
4 - 5	0.154	1.387	4	.847
5 - 5	0.026	0.039	1	.844

level of significance where p = .05. All these significant correlations were recorded in School C and demonstrated significant agreement between the scores of teachers on Factor 2, and the scores of parents on Factors 1 through 5. That is to say, significant agreement existed between parents' views on the conditions in the school, which related to the level of student satisfaction, and the views of teachers on the Institutional Aspects of the School. The distribution of the significant correlations is illustrated in Figure 5.

Figure 5

Distribution of Significant Correlations
Parent Perception and Teacher Perception in all Schools

		Teacher Perception				
	Factors	1	2	3	4	5
Parent Perception	1		C			
	2		C			
	3		C			
	4		C			
	5		C			

No data were available in this study to account, with any certainty, for the significant level of agreement between parents and teachers in this school. However, other correlations recorded between certain aspects of parents' and teachers' perceptions, which did not attain statistical significance, raised the possibility that parents at School C may have been in agreement with the policies implemented by the teachers but still were not certain that the most satisfactory educational experiences were available to the students.

The only characteristic which seemed to set teachers in School C apart from teachers in other schools was the predominance of male teachers employed in the school. It might well have been the case that parents at the school believed in a "firm but fair" approach to education for their children and that a staff, composed mainly of male teachers, could best provide that atmosphere. But no data were collected in this study which would provide evidence for or against this proposition. Similarly, no follow-up study was conducted to allow the investigation of those matters for which explanations were not found during the first study.

The correlation matrix presented in Table 31 demonstrated the level of agreement which existed between the perceptions of parents and those of teachers. No significant correlations were recorded and 36 percent of the correlations based on the responses from all schools were negative in direction. The canonical correlations calculated between the pairs of composites derived from the factor scores on Parent Perception and Teacher Perception reflected the same lack of agreement. None of the canonical correlations presented in Table 32 were of sufficient magnitude to achieve statistical significance at the level $p = .05$.

Although significant and positive correlations were recorded between the perceptions of teachers and parents in School C, no corresponding agreement was reported in any of the other schools. The evidence presented in Table 31, of the correlation between the perceptions of teachers and parents in all schools, indicated that no agreement existed between parents and teachers on those conditions in the schools that were necessary to provide students with a satisfying educational experience.

Summary

The relationships which have been demonstrated between the perceptions of the school held by students, parents and teachers indicated that while differences existed in some schools between the perceptions held by members of each group, parents and students were far closer in their agreement than they were with teachers. Students and parents in Schools A and D seemed to be less in agreement with their perceptions of the school than was the case between parents and students in Schools B and C. It was a matter of fact that Indian and Metis students made up 67.2 percent of the enrollment of School A and 10.8 percent of the enrollment at School D. Whether the presence of these students accounted for the lower level of agreement between parents and students could not be determined by the data available.

The relationship between the perceptions of students and teachers demonstrated a range of reactions which varied from slight but mostly positive correlations in three schools, to evident dissatisfaction in the fourth. Again, the influence of the Indian and Metis students on these results must be questioned. Was the influence of these students sufficient to account for the negative relationships demonstrated, or were the negative relationships to the perceptions of teachers due to a more general dissatisfaction on the part of the students at these schools with the educational offerings of the schools? These questions could not be answered by the data available.

The comparison of the perceptions of parents, students and teachers demonstrated in Table 14 summarized the status of each group in relation to the others. It does not suggest a comparison between schools so much as an effort to identify areas for further investigation.

The closeness of parents and students in their perceptions of the school was reflected in the rank order positions which each held on the basis of the means of the Total and Factor Scores on the Student Satisfaction Scale. Apart from a few variations in position on some of the factor scores, parents and students maintained the same relative positions to each other.

Parents and students at School B recorded the highest levels of satisfaction on the total and all factor scores. Parents and students at School D recorded the next highest level of Satisfaction. But on Factor 4, relating to the Instructional Atmosphere of the School, students recorded their lower satisfaction through scores which moved them to 4th position. Both parents and students expressed lower satisfaction on Factor 5, relating to Student Identity, which lowered their position to 3rd in rank order. Parent scores on Factor 1, concerned with Personal Relations within the School, reflected a lower level of satisfaction such that their position in this factor fell to 3rd in rank order. Taken in combination, parents and students expressed lower satisfaction with the Personal Relations within the School and with the attention paid to Student Identity, while students, in addition, expressed lower levels of satisfaction with the Instructional Atmosphere of the School. These data do not explain the lack of correlations reported between parents and students, on the one hand, and teachers on the other, on their perceptions of the school. But they serve to identify starting points for subsequent investigations.

Parents and students in School A occupied 3rd position in the rank order, but expressed greater satisfaction with the attention given to student identity, such that their scores on this factor moved them to 2nd position. Students expressed greater satisfaction with the Instructional Atmosphere, and parents with the Personal Relations within the School so that their scores on these factors moved them to 2nd place in the rank order. In summary, while parents and students at School A were relatively low in terms of their general satisfaction with the school, they reflected greater satisfaction on the factors of Student Identity, the Instructional Atmosphere of the School, and the Personal Relations within the School.

Parents and students in School C fell into 4th position on all their scores, except that students expressed greater satisfaction with the Instructional Atmosphere of the School such that their response moved them to 3rd position. Parents recorded greater satisfaction with the attention paid to Student Identity such that they moved to 3rd position on this factor.

Teacher scores bore little resemblance to those recorded by parents and students, in that they were considerably higher on the total scores and on the factor scores. Only in School B were the teacher scores comparable to the scores recorded by parents and students. In other schools it was as though teachers were responding to an environment which only they had experienced, so much higher were their scores.

Clearly, with such disparities between the perceptions of the school held by parents, students and teachers, much work is needed to develop a concept which is recognizable to all. The following section investigates the relationship between teacher morale and the perceptions of the school held by parents, students and teachers.

THE MORALE OF TEACHERS

The morale of teachers represents a complex subject for investigation because of the variety of relationships in which the teacher is involved as a member of the school and as a member of the community. First, he functions as an employee of the School Board, whose contract specifies his activities, his conditions of work and his role relationships. Within the school his activities are more closely directed by the Principal, while his life in the school, and perhaps outside the school, is spent in interaction with other teachers. Within the classroom certain relations prevail between students and teachers. Different sets of teacher/student relationships exist within each classroom or group of students. As a member of the school staff, the teacher interacts with the parents of his students on matters of joint concern. Outside the school the teacher may be involved in different sets of relationships with parents, students or other members of the community.

The influences of each of these interactions has some bearing on the attitudes and levels of satisfaction teachers being to and derive from their performance as teachers. The Purdue Teacher Opinionaire recognizes teacher morale as a multi-dimensional phenomenon. It measures teacher responses to ten situational variables related to the school, the school board, the educational curriculum and the interpersonal and personal satisfactions derived from the role of teacher.

The ten factors which comprise the Purdue Teacher Opinionaire, as a measure of teacher morale, are listed in summary form in Figure 6. A more detailed description of the factors was presented in Chapter 3.

Figure 6

Factor Descriptions for Teacher Morale

Factor 1.	Teacher Rapport with Principal
Factor 2.	Satisfaction with Teaching
Factor 3.	Rapport among Teachers
Factor 4.	Teacher Salary
Factor 5.	Teacher Load
Factor 6.	Curriculum Issues
Factor 7.	Teacher Status
Factor 8.	Community Support of Education
Factor 9.	School Facilities and Services
Factor 10.	Community Pressures

The means of the total and factor scores on Teacher Morale are presented in Table 33. These data are presented as a supplement to the statistical analysis performed in this chapter.

An examination of the data related to the three aspects of Problem 2 follows.

Problem 2.1

> "What is the relationship between Teacher Morale and Student Satisfaction?"

The relationship between the factor scores on Student Satisfaction and the factor scores for Teacher Morale, for Schools A through D, is presented in Tables 34 through 37. Tables 28 and 39 demonstrate the inter-correlation matirx and the canonical correlations for all schools.

The relationships demonstrated in each of the schools between Teacher Morale and Student Satisfaction were quite different and ranged

Table 33

Means of the Total and Factor Scores for Teachers
on the Teacher Opinionaire - By School
(Standard Deviations in Brackets)

	Total Score	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	Factor 9	Factor 10
School A	351.0	72.8	71.0	51.3	22.6	40.1	16.7	27.1	16.9	14.3	18.5
	(29.7)	(9.1)	(6.5)	(3.8)	(4.3)	(3.1)	(2.1)	(3.2)	(1.9)	(3.2)	(1.2)
School B	320.4	72.0	63.9	45.9	20.2	38.0	13.8	25.1	14.4	11.7	16.5
	(49.0)	(8.3)	(16.0)	(7.9)	(4.3)	(5.3)	(3.0)	(5.8)	(3.3)	(4.3)	(2.9)
School C	327.2	64.5	68.0	50.8	20.7	37.5	17.0	23.7	15.0	13.9	16.8
	(41.8)	(12.5)	(9.3)	(3.8)	(4.1)	(4.8)	(3.1)	(5.8)	(3.4)	(4.0)	(3.6)
School D	313.6	58.5	67.3	44.6	20.8	36.6	15.7	23.1	14.5	16.7	16.0
	(37.8)	(11.3)	(8.5)	(5.4)	(4.8)	(6.5)	(2.6)	(4.7)	(2.8)	(3.0)	(2.4)

Table 34

Pearson R Correlation Between Factor Scores of Teacher
Morale and Student Satisfaction
School A N = 12

	Teacher Morale Factors 1 - 10										Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.50	.87	.57	.27	.50	.41	.69	.59	.10	-.45	-.46	-.37	-.22	-.37
2			.64	.75	.03	.44	.51	.77	.66	.31	-.29	-.34	-.12	-.27	-.10
3				.57	.26	.61	.42	.66	.62	.35	-.41	-.39	-.22	-.33	-.19
4					.42	.58	.76	.85	.72	-.04	-.51	-.70	-.41	-.52	-.44
5						.47	.75	.29	.30	-.41	-.07	-.22	-.01	-.14	-.18
6							.56	.60	.77	.46	.13	-.23	.17	.11	-.06
7								.67	.54	-.15	-.25	-.28	-.03	-.27	-.02
8									.75	.25	-.32	-.41	-.15	-.23	-.21
9										.32	-.03	-.31	.02	-.01	-.15
10											.39	.36	.52	.36	.45
11												.81	.90	.92	.50
12													.90	.78	.78
13														.80	.73
14															.44
15															1.00

Approximate
values of

r and p
.57 = .05
.70 = .01
.75 = .005
.80 = .002

Table 35

Pearson R Correlation Between Factor Scores of Teacher
Morale and Student Satisfaction
School B N = 10

	Teacher Morale Factors 1 - 10										Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.80	.91	.10	.90	.27	.84	.91	.09	.52	.22	.26	.25	.26	.38
2			.76	-.00	.79	.28	.93	.83	.22	.69	.31	.08	.66	.43	.51
3				-.20	.83	.29	.78	.80	.17	.44	.25	.26	.31	.27	.53
4					.21	-.41	.13	.23	.13	-.22	.01	.14	-.27	-.05	-.04
5						.01	.75	.76	-.03	.48	.10	.03	.22	.04	.23
6							.33	.30	.09	.45	.61	.52	.48	.63	.44
7								.94	.43	.53	.40	.30	.52	.53	.61
8									.43	.50	.42	.43	.38	.53	.58
9										.11	.64	.66	.40	.73	.56
10											.52	.20	.80	.52	.13
11												.86	.69	.91	.63
12													.32	.80	.60
13														.76	.50
14															.72
15															1.00

Approximate values of

r and p
.63 = .05
.76 = .01
.80 = .005
.84 = .002

Table 36

Pearson R Correlation Between Factor Scores of Teacher
Morale and Student Satisfaction
School C N = 12

	Teacher Morale Factors 1 - 10										Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.46	.84	.33	.06	.53	.68	.54	.42	.61	.46	.47	.61	.22	.27
2			.44	.51	.44	.87	.71	.64	.69	.62	.60	.46	.66	-.04	.42
3				.23	.33	.59	.54	.52	.44	.63	.21	.25	.39	.05	.07
4					.38	.68	.58	.78	.58	.27	.77	.66	.68	.22	.61
5						.61	.09	.33	.52	.66	.12	.17	.12	.32	.47
6							.75	.75	.77	.69	.68	.60	.69	.18	.51
7								.68	.59	.44	.76	.80	.90	.27	.48
8									.81	.39	.69	.53	.67	-.08	.36
9										.42	.53	.40	.46	.03	.53
10											.34	.42	.49	.44	.44
11												.91	.91	.34	.65
12													.93	.63	.74
13														.37	.61
14															.73
15															1.00

Approximate
values of

r and p
.58 = .05
.71 = .01
.75 = .005
.80 = .002

Table 37

Pearson R Correlation Between Factor Scores of Teacher Morale and Student Satisfaction
School D N = 28

	Teacher Morale Factors 1 - 10										Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.49	.56	.59	.52	.45	.76	.57	.34	.52	-.11	-.15	-.12	-.00	-.03
2			.44	.30	.27	.34	.51	.42	.25	.38	.11	.02	.06	.22	.17
3				.34	.23	.16	.47	.46	.22	.34	-.03	-.22	-.16	.05	-.04
4					.38	.41	.66	.60	.40	.48	.13	.14	-.06	.21	.18
5						.68	.50	.58	.53	.52	.06	-.15	-.04	.06	.01
6							.52	.65	.53	.39	.16	.11	.19	.34	.07
7								.72	.25	.57	-.22	-.08	-.21	-.01	-.14
8									.38	.51	.13	.13	-.11	.23	.08
9										.16	.21	.17	.10	.22	.27
10											.01	-.23	-.12	-.02	.02
11												.76	.52	.74	.67
12													.39	.76	.52
13														.48	.23
14															.48
15															1.00

Approximate values of

r	and p
.38	= .05
.48	= .01
.52	= .005
.56	= .002

Table 38

Correlation Between Factor Scores on Teacher
Morale and Student Satisfaction
for all Schools N = 62

	Teacher Morale Factors 1 - 10										Student Satisfaction Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.44	.66	.44	.47	.33	.71	.60	*	.54	*	- *	*	- *	*
2			.55	.32	.40	.46	.65	.62	.36	.52	- *	- *	*	- *	*
3				*	.40	.37	.55	.59	*	.47	-.30	-.38	- *	-.36	- *
4					.37	.35	.55	.60	.39	.28	- *	- *	- *	- *	*
5						.49	.51	.55	.27	.51	- *	- *	*	- *	*
6							.49	.60	.50	.49	- *	- *	- *	- *	- *
7								.76	.28	.52	*	*	*	- *	*
8									.44	.51	- *	- *	*	- *	*
9										*	- *	*	*	*	- *
10											- *	- *	*	- *	*
11												.92	.89	.90	.78
12													.83	.92	.74
13														.83	.70
14															.66
15															1.00

Approximate
values for

r and p
* = N.S.
.25 = .05
.32 = .01
.35 = .005
.38 = .002

Table 39

Canonical Correlation Between Each Pair of New Composites Student Satisfaction Factors - Teacher Moral Factors for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.628	60.903	50	.135
2 - 5	0.487	33.866	36	.572
3 - 5	0.439	19.221	24	.742
4 - 5	0.343	7.673	14	.906
5 - 5	0.130	0.925	6	.988

from positive and significant correlations in two schools to widespread negative correlations in the other two schools.

In School A, only one negative correlation between Teacher Morale and Student Satisfaction was found to be statistically significant. However, of the other correlations recorded, a number of positive and a greater number of negative correlations approached the required level of significance. No positive correlations attained statistical significance.

In School B the situation was quite different. Sixteen percent of the positive correlations achieved statistical significance while many of the other positive correlations approached this level. None of the three negative correlations was statistically significant.

In School C a similar situation prevailed. Only two of the correlations recorded were negative in direction while 15 of the positive correlations were statistically significant, and many more were close to this level. None of the negative correlations was statistically significant.

In School D a similar position prevailed to that demonstrated in School A. None of the correlations recorded in School D was statistically significant. On the basis of these data it was evident that no significant relationship existed between the levels of Teacher Morale and Student Satisfaction in School D.

The positive correlations recorded in Schools B and C indicated that some degree of interrelationship existed between the level of Teacher Morale and Student Satisfaction, such that each was likely to respond favourably to the other. In Schools A and D no such relationship existed. While lacking statistical significance, the presence of the many negative correlations indicated the likelihood that the relationships within the school were not supportive of Teacher Morale or Student Satisfaction.

The distribution of significant correlations between Teacher Morale and Student Satisfaction, in all schools, is presented in Figure 7.

Figure 7

Distribution of Significant Correlations
Teacher Morale and Student Satisfaction
in all Schools

		Student Satisfaction				
	Factors	1	2	3	4	5
	1			C		
	2	C		B C		
	3					
	4	C	A C	C		C
	5					
Teacher Morale	6	B C	C	C	B	
	7	C	C	C		B
	8	C		C		
	9	B	B		B	
	10			B		

A = negative correlation

Although a number of significant correlations were recorded between Student Satisfaction and Teacher Morale in Schools B and C, the influence of the negative responses from Schools A and D were such that, when the responses for all schools were merged, only three significant correlations were recorded. These were negative in direction and were statistically significant beyond the level p = .05. These data are presented in Table 38. The canonical correlations calculated between the pairs of composites derived from the factor scores on Student Satisfaction and Teacher Morale reflected the same lack of agreement. None of the canonical correlations, illustrated in Table 39, were of sufficient magnitude to achieve statistical significance at the level p = .05.

On the basis of these data it appeared that, while agreement existed in some schools between Student Satisfaction and Teacher Morale, in the overall situation a slight negative relationship existed between Teacher Morale and Student Satisfaction. The existence of a neutral to negative relationship between the morale of teachers and the satisfaction of students has implications for the administrators of these schools in that there is need for them to discover ways in which the student/teacher relationships in their schools might be improved.

Problem 2.2

> "What is the relationship between Teacher Morale and Parent Perception?"

The relationship between the factor scores of Teacher Morale and the factor scores of Parent Perception, for Schools A through D, is presented in Tables 40 through 43. Tables 44 and 45 demonstrate the intercorrelation matrix between Teacher Morale and Parent Perception, and the canonical correlations calculated from these data for all schools.

Table 40

Pearson R Correlation Between Factor Scores of Teacher
Morale and Parent Perception
School A N = 12

	Teacher Morale Factors 1 - 10										Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.50	.87	.57	.27	.50	.41	.68	.59	.10	-.62	-.42	-.28	-.21	-.18
2			.64	.75	.03	.44	.51	.77	.66	.31	-.26	-.29	.17	.08	.17
3				.57	.26	.61	.42	.66	.62	.35	-.54	-.37	.01	-.09	-.04
4					.42	.58	.76	.85	.72	-.04	-.44	-.52	-.09	-.32	-.03
5						.47	.75	.29	.30	-.41	.09	-.08	.15	-.02	-.08
6							.56	.60	.77	.46	-.55	-.66	-.12	-.15	-.48
7								.67	.54	-.15	-.10	-.11	.35	.16	.10
8									.75	.25	-.45	-.34	-.03	-.04	.10
9										.32	-.62	-.65	-.22	-.17	-.31
10											-.32	-.17	.13	.26	-.03
11												.81	.60	.60	.61
12													.72	.76	.79
13														.82	.70
14															.58
15															1.00

Approximate values of

r and p
.58 = .05
.70 = .01
.75 = .005
.80 = .002

Table 41

Pearson R Correlation Between Factor Scores of Teacher
Morale and Parent Perception
School B N = 10

	Teacher Morale Factors 1 - 10										Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.80	.91	.10	.90	.27	.84	.91	.09	.52	-.02	.28	.21	-.11	.25
2			.76	-.00	.79	.28	.93	.83	.22	.69	.24	.53	.65	-.00	-.05
3				-.20	.83	.29	.78	.80	.17	.44	-.14	.34	.22	-.18	.08
4					.21	-.41	.13	.23	.13	-.22	.04	-.16	-.11	.01	.38
5						.01	.75	.76	-.03	.48	-.08	.06	.12	-.16	.11
6							.33	.30	.09	.45	.39	.62	.52	.45	.12
7								.94	.43	.53	.17	.55	.58	.01	.07
8									.43	.50	.17	.50	.43	.04	.34
9										.11	.34	.41	.32	.36	.27
10											.72	.36	.52	.55	.28
11												.45	.57	.88	.51
12													.90	.23	.10
13														.28	-.08
14															.60
15															1.00

Approximate
values of

r and	p
.63 =	.05
.76 =	.01
.80 =	.005
.84 =	.002

Table 42

Pearson R Correlation Between Factor Scores of Teacher Morale and Parent Perception
School C N = 12

	Teacher Morale Factors 1 - 10										Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.46	.84	.33	.06	.53	.68	.54	.42	.61	-.15	-.21	.23	-.01	-.05
2			.44	.51	.44	.87	.71	.64	.69	.62	-.02	-.09	.45	.30	.23
3				.23	.33	.59	.54	.52	.44	.63	-.27	-.35	.04	-.15	.02
4					.38	.68	.58	.78	.58	.27	-.09	-.11	.47	.27	.33
5						.61	.09	.33	.52	.66	.39	.29	.49	.55	.61
6							.75	.75	.77	.69	-.05	-.19	.47	.33	.38
7								.68	.59	.44	-.14	-.10	.41	.18	.12
8									.81	.39	-.29	-.37	.18	.06	-.04
9										.42	.17	.07	.38	.42	.27
10											.21	.10	.54	.43	.31
11												.96	.71	.89	.69
12													.67	.84	.64
13														.90	.78
14															.77
15															1.00

Approximate values of

r and p
.58 = .05
.69 = .01
.75 = .005
.79 = .002

Table 43

Pearson R Correlation Between Factor Scores of Teacher
Morale and Parent Perception
School D N = 28

	Teacher Morale Factors 1 - 10										Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.49	.56	.59	.52	.45	.76	.57	.34	.52	-.28	-.40	-.28	-.14	.17
2			.44	.30	.27	.34	.51	.42	.25	.38	-.06	-.09	-.07	-.00	.26
3				.34	.23	.16	.47	.46	.22	.34	-.04	-.12	-.08	-.07	.20
4					.38	.41	.66	.60	.40	.48	-.07	-.18	-.24	.03	.16
5						.38	.50	.58	.53	.50	-.09	-.00	-.11	-.00	.29
6							.52	.65	.53	.39	-.01	-.05	-.06	.18	.16
7								.72	.25	.57	-.17	-.28	-.22	-.12	.14
8									.38	.51	-.09	-.13	-.19	.03	.29
9										.16	-.12	-.02	-.16	.12	.08
10											-.02	-.09	.03	.03	.24
11												.89	.92	.87	-.40
12													.87	.85	-.31
13														.82	-.54
14															-.43
15															1.00

Approximate
values of

r and p
.38 = .05
.48 = .01
.52 = .005
.56 = .002

Table 44

Correlation Between Factor Scores on
Teacher Morale and Parent Perception
for all Schools N = 62

	Teacher Morale Factors 1 - 10										Parent Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.44	.66	.44	.47	.33	.71	.60	*	.54	*	- *	*	*	.29
2			.55	.32	.40	.46	.65	.62	.36	.52	- *	- *	- *	- *	- *
3				*	.40	.37	.55	.59	*	.47	- *	-.26	- *	-.27	*
4					.37	.35	.55	.60	.39	.28	- *	- *	- *	- *	*
5						.49	.51	.55	.27	.51	*	- *	- *	*	*
6							.49	.60	.50	.49	-.29	-.32	- *	- *	- *
7								.76	.28	.52	*	- *	*	*	*
8									.44	.51	- *	- *	- *	- *	*
9										*	-.28	- *	- *	- *	-.27
10											*	- *	*	*	*
11												.89	.91	.92	.58
12													.89	.86	.53
13														.88	.41
14															.51
15															1.00

Approximate values of

r and p
* = N.S.
.25 = .05
.32 = .01
.35 = .005
.38 = .002

Table 45

Canonical Correlation Between Each Pair of New Composites Parent Perception Factors - Teacher Morale Factors for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.639	78.604	50	.006
2 - 5	0.612	50.298	36	.057
3 - 5	0.529	24.986	24	.405
4 - 5	0.291	7.244	14	.925
5 - 5	0.211	2.451	6	.877

The degree of correlation reported between the factor scores of parents and those of teachers varied from school to school, both in magnitude and in direction. In the four schools significant correlations were recorded in both positive and negative directions. The distribution of these correlations is illustrated in Figure 8.

Figure 8

Distribution of Significant Correlations
Teacher Morale and Parent Perception
in all Schools

Factors	Parent Perception				
Teacher Morale	1	2	3	4	5
1	$\underline{A}$ $\underline{D}$				
2		B			
3					
4					
5				C	
6		$\underline{A}$ B			
7					
8					
9	$\underline{A}$	$\underline{A}$			
10	B				

$\underline{A}$ = negative correlation

There were considerably fewer significant correlations between the morale of teachers and the perceptions of parents than had been the case between teachers and students. Parents at Schools B and C were the only ones to record positive correlations that were statistically significant. Parents at School B were most favourably related to teacher morale. Three significant correlations were recorded between Teacher Morale and Parent Perception. In School C, a number of positive correlations approached the required level for statistical significance but only one correlation achieved significance. In School B a number of other positive correlations were close to significance, while a smaller number in School C fell just short of this level. In School A, parents recorded four significant negative correlations with a number more falling just short of the required level of $p = .05$. In School D only one significant correlation was recorded, this was negative in direction. None of the positive correlations recorded in Schools A or D approached the required level to achieve statistical significance.

In general terms, parents' perceptions of the school contrasted with the teachers' morale scores on the first four factors of the Student Satisfaction Scale, with the first two factors registering the greatest number of negative correlations. That is to say, parents reacted negatively to the Personal Relationships within the School, to the Institutional Aspects of the School, and to a lesser extent to the Supervisory Attitudes of Teachers and the Instructional Atmosphere of the school. The negative responses were not general for all schools but were concentrated in the parents of Schools A and D, and to a lesser extent in the parents of School C.

The pattern of negative correlations between the perception of parents and the morale of teachers was again demonstrated when the inter-correlations between parents and teachers in all schools were calculated. These data are presented in Table 44. Of the inter-correlations recorded, only one of the seven significant correlations was positive in direction, the remainder were negative. In terms of the small number of statistically significant correlations recorded, the negative relations between the morale of teachers and the perception of parents does not evoke concern. But in terms of the administrative implications, the situation is quite different. It would be unwise for any administrator in possession of similar data to ignore the need to establish better relations with parents and to seek out ways to change the perception of the school held by parents in an attempt to increase the level of community support available to him.

The canonical correlations calculated between the pairs of composites derived from the factor scores on Parent Perception and Teacher Morale demonstrated the strength of the parents' negative responses. Two of the canonical correlations derived between these sets of variables were significant to the level $p = .05$. These data are presented in Table 45.

On the basis of these data, parent perceptions of the school were negatively related to the levels of teacher morale to a limited but significant extent. In particular, parents' perceptions on Factors 1, 2 and 4, which related to the Personal Relationships, the Institutional Aspects and the Instructional Atmosphere of the School, correlated negatively with the teachers' scores on Factors 3, 6 and 9. These factors referred to the Rapport among Teachers, their concern with Curriculum Issues, and their satisfaction with School Facilities and Services.

Problem 2.3

"What is the relationship between Teacher Morale and Teacher Perception?"

The relationship between the factor scores of Teacher Morale and the factor scores of Teacher Perception, for Schools A through D, is presented in Tables 46 through 49. Tables 50 and 51 demonstrate the intercorrelation matrix between Teacher Morale and Teacher Perception and the canonical correlations calculated for all schools from these data.

In general terms there was a good deal of agreement between the perceptions of the school held by teachers and the level of teacher morale, but there were variations in the extent of agreement between schools. In Schools A and D teachers demonstrated the lowest number of significant correlations between Teacher Morale and Teacher Perception. In School A only 18 percent of the correlations were statistically significant and all of these were positive. Only two of the eleven negative correlations recorded approached the required level of significance. Nine of the negative correlations existed between Factor 4 on the Student Satisfaction Scale, relating to the Instructional Atmosphere of the School, and Factors 1 through 9 on Teacher Morale. The factor scores of teachers at School A on Factor 4 of the Student Satisfaction Scale were proportionately lower than their scores on the other factors. On this basis, it appeared that their satisfaction with the Instructional Atmosphere in School A contrasted with their satisfaction with the other aspects of the school environment.

In School D, a greater number of correlations were statistically significant. Thirty percent of the correlations were positive and significant, while another 14 percent were within .03 points

Table 46

Pearson R Correlation Between Factor Scores of Teacher
Morale and Teacher Perception
School A N = 12

	Teacher Morale Factors 1 - 10										Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.50	.87	.57	.27	.50	.41	.68	.59	.10	.62	.46	.61	-.27	.38
2			.64	.75	.03	.44	.51	.77	.66	.31	.51	.19	.21	-.17	.65
3				.57	.26	.61	.42	.66	.62	.35	.72	.63	.58	-.00	.62
4					.42	.58	.76	.85	.72	-.04	.18	-.05	.06	-.56	.23
5						.47	.74	.29	.30	-.41	.07	.11	.06	-.52	-.13
6							.56	.60	.77	.46	.28	.41	.37	-.01	.35
7								.67	.54	-.15	.29	.19	.18	-.47	.15
8									.75	.25	.41	.27	.47	-.36	.55
9										.32	.12	.38	.21	-.26	.37
10											.34	.55	.49	.74	.61
11												.61	.73	.22	.72
12													.71	.44	.62
13														.34	.56
14															.25
15															1.00

Approximate
values of

r and p
.57 = .05
.70 = .01
.75 = .005
.80 = .002

Table 47

Pearson R Correlation Between Factor Scores of Teacher Morale and Teacher Perception
School B N = 10

	Teacher Morale Factors 1 - 10										Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.80	.91	.10	.90	.27	.84	.91	.09	.52	.86	.75	.54	.78	.69
2			.76	-.00	.79	.28	.93	.83	.22	.69	.81	.60	.64	.65	.42
3				-.20	.83	.29	.78	.80	.17	.44	.89	.79	.73	.72	.59
4					.21	-.41	.13	.23	.13	-.22	-.36	-.47	-.50	-.00	-.18
5						.01	.75	.76	-.03	.48	.79	.58	.56	.88	.49
6							.33	.30	.09	.45	.42	.70	.46	.18	.70
7								.94	.43	.53	.74	.58	.49	.55	.46
8									.43	.50	.70	.59	.42	.55	.53
9										.11	-.04	-.12	.03	-.37	-.06
10											.67	.60	.67	.49	.54
11												.90	.75	.77	.72
12													.75	.72	.81
13														.64	.43
14															.51
15															1.00

Approximate values of

r and p
.63 = .05
.76 = .01
.80 = .005
.84 = .002

Table 48

Pearson R Correlation Between Factor Scores of Teacher Morale and Teacher Perception
School C N = 12

	Teacher Morale Factors 1 - 10										Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.46	.84	.33	.06	.53	.68	.54	.42	.61	.74	.35	.48	.46	.22
2			.44	.51	.44	.87	.71	.64	.69	.62	.57	.35	.43	.69	-.08
3				.23	.33	.59	.54	.52	.44	.63	.66	.25	.54	.49	.22
4					.38	.68	.58	.78	.58	.27	.41	.52	.39	.27	.27
5						.61	.09	.33	.52	.66	.33	.65	.69	.63	.03
6							.75	.75	.77	.69	.67	.59	.68	.77	.04
7								.68	.59	.44	.43	.38	.30	.39	.04
8									.81	.39	.64	.40	.53	.48	.22
9										.42	.69	.69	.74	.69	.38
10											.58	.51	.67	.80	-.20
11												.55	.81	.79	.39
12													.82	.64	.40
13														.88	.41
14															.07
15															1.00

Approximate values of

r and p
.57 = .05
.70 = .01
.75 = .005
.80 = .002

Table 49

Pearson R Correlation Between Factor Scores of Teacher
Morale and Teacher Perception
School D N = 28

	Teacher Morale Factors 1 - 10										Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.49	.56	.59	.52	.45	.76	.57	.34	.52	.47	.27	.47	.30	.08
2			.44	.30	.27	.34	.51	.42	.25	.38	.51	.12	.52	.28	.23
3				.34	.23	.16	.47	.46	.22	.34	.59	.44	.57	.10	.07
4					.38	.41	.66	.60	.40	.48	.23	.34	.35	.20	.25
5						.67	.50	.58	.53	.50	.27	.21	.34	.47	.03
6							.52	.65	.53	.39	.30	.14	.33	.36	.08
7								.72	.25	.57	.47	.34	.43	.30	.31
8									.38	.51	.25	.36	.36	.38	.10
9										.16	.16	.08	.26	.13	.17
10											.43	.40	.37	.44	.23
11												.60	.72	.44	.49
12													.57	.52	.34
13														.48	.32
14															.07
15															1.00

Approximate
values of

r and p
.37 = .05
.47 = .01
.52 = .005
.56 = .002

Table 50

Correlation Between Factor Scores on
Teacher Morale and Teacher Perception
for all Schools N = 62

	Teacher Morale Factors 1 - 10										Teacher Perception Factors 1 - 5				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1.00	.44	.66	.44	.47	.33	.71	.60	*	.54	.65	.42	.51	.27	*
2			.55	.32	.40	.46	.65	.62	.36	.52	.56	.33	.48	.37	.26
3				*	.40	.37	.55	.59	*	.47	.72	.61	.59	.27	*
4					.37	.35	.55	.60	.39	.28	*	*	.25	*	*
5						.49	.51	.55	.27	.51	.37	.36	.46	.39	*
6							.49	.60	.50	.49	.42	.43	.48	.36	*
7								.76	.28	.52	.52	.40	.42	.25	*
8									.44	.51	.50	.44	.49	.31	*
9										*	*	*	.27	*	*
10											.55	.51	.59	.57	*
11												.69	.75	.51	.50
12													.67	.53	.46
13														.59	.34
14															*
15															1.00

Approximate values of

r and p
* = N.S.
.25 = .05
.32 = .01
.35 = .005
.38 = .002

Table 51

Canonical Correlation Between Each Pair of New Composites
Teacher Perception Factors - Teacher Morale Factors
for all Schools

Pairs of Composites	Canonical Correlation	Chi-Square	Degrees Freedom	Probability Value
1 - 5	0.831	107.486	50	.000
2 - 5	0.572	44.097	36	.166
3 - 5	0.466	22.678	24	.539
4 - 5	0.360	9.468	14	.800
5 - 5	0.190	1.975	6	.922

of correlation of the level required for statistical significance. Unlike School A, there were no negative correlations recorded.

In School B, 38 percent of the correlations between Teacher Morale and Teacher Perception were positive and significant. There were, however, a number of non-significant negative correlations between all Factors of Teacher Perception and Factors 4 and 9 of Teacher Morale. These factors related to the satisfaction of teachers with their salary scales, and their satisfaction with the facilities and services in the school.

In School C, nineteen of the correlations were positive and significant and a small number of positive correlations were near to significance. Only two of the correlations received were negative and these were not significant. On the basis of these data, it appeared that a substantial degree of agreement existed between the morale of teachers and their perceptions of the school as environments likely to produce educational experiences satisfying for students.

The distribution of significant correlations, presented in Figure 9, illustrated the extent to which teachers in the four schools were in agreement on the relationship between their factor scores on Teacher Morale and Teacher Perception. In two of the cells of the matrix, teachers in the four schools all recorded significant correlations. These were between Factor 1 on Teacher Perception, and Factors 1 and 3 on Teacher Morale. That is to say, the perceptions of teachers of the Personal Relations in the School were significantly related, for all teachers, to the extent of Teacher Rapport with the Principal and with the level of Rapport among Teachers. In seven other cells of the matrix, significant correlations were reported between teachers from three of the schools, while six other cells contained significant correlations from teachers in two of the schools. These data are reported in Figure 9.

Figure 9

Distribution of Significant Correlations
Teacher Morale and Teacher Perception
in all Schools

		Teacher Perception				
Factors		1	2	3	4	5
Teacher Morale	1	A B C D	B	A D	B	B
	2	B C D		B D	B C	A
	3	A B C D	A B D	A B D	B	A
	4					
	5	B	C	C	B C D	
	6	C	B C	C	C	B
	7	B D		D		
	8	B C			D	
	9	C	C	C	C	
	10	B C D	D	B C D	A C D	A

The matrix of inter-correlations recorded between Teacher Morale and Teacher Perception for all teachers, presented in Table 50, demonstrated that 70 percent of the correlations were positive and significant. No negative correlations were recorded. On Factor 5 of Teacher Perception, teacher responses were such that only one significant correlation was recorded with the factors of Teacher Morale. This correlation occurred with Factor 2 of Teacher Morale which dealt with Satisfaction with Teaching. On this basis, it appeared that teachers who were satisfied with teaching were also likely to be understanding of the student's need for identity. Two factors of Teacher Morale which did not correlate to any extent with factors of Teacher Perception were Factors 4 and 9. These factors related to Teacher Salary and School Facilities and they correlated only with Factor 3 on Teacher Perception, which had to do with the Supervisory Attitudes of Teachers. No meaningful explanation can be given for these correlations.

Despite the widespread pattern of significant correlations, the canonical correlation calculated between the pairs of composites derived from the factor scores on Teacher Morale and Teacher Perception was only significant between one pair of composites. The other correlations derived fell far below the level required to achieve statistical significance at the level $p = .05$. The data relating to the canonical correlations between the pairs of composites are presented in Table 51.

Teacher Morale was demonstrated to be related to the perceptions teachers held of the school as a satisfying educational experience for students. The morale of teachers was more closely related to Teacher Perception in schools where there was closer agreement demonstrated between Teacher Morale and the perceptions of parents and students on those conditions in the schools which contributed to a higher level of student satisfaction. In the absence of evidence, in the factor scores of teachers, indicating the presence of community influences on teacher perceptions or morale, it is likely that the closer agreement between the views of teachers and those of parents and students resulted from a greater sensitivity, on the part of the teachers, to the needs and aspirations of the community.

Summary

The relationships which emerged between the morale of teachers and the perceptions of the school held by parents, students and teachers was quite different in each of the schools. In Schools B and C, the relationship between Student Satisfaction and Teacher Morale was largely positive and significant, with many more positive correlations approaching the required level of significance. In School A, no positive correlations attained statistical significance while one negative correlation attained this level. In School D, none of the calculations recorded was statistically significant.

The relationship between Teacher Morale and Parent Perception resembled, but was more negative than, the pattern established between students and teachers. Parents in Schools B and C recorded a greater number of negative correlations, though none was significant, than was the case between teachers and students. Three positive correlations in School B were significant and one in School C. In School A, four negative correlations were recorded which achieved statistical significance. In School D one significant negative correlation was recorded between Teacher Morale and Parent Perception.

The relationship between Teacher Morale and Teacher Perception was mostly positive in all schools. A small number of non-significant negative correlations was recorded in Schools A and B, but the predominant responses were positive and significant. The relationship between Teacher Morale and Teacher Perception in Schools C and D was more positive with a greater number of correlations above the significance level of $p = .05$.

Although different perceptions of the school were held by parents, students and teachers, each of the perceptions appeared to have been arrived at without consultation between the three participant groups. On the basis of the mean factor scores on Teacher Morale, reported in Table 33, none of the teachers in the four schools perceived markedly different levels of community support, differences in the community status of teachers, or community pressures which would have suggested direct community involvement in the policy-making processes of the schools. In some schools, for example School A, teachers' perceptions of the school and their morale scores, bore little relationship to the perceptions concerning the school held by parents and students. It was difficult to account for the great discrepancy between the perception scores of parents, students and teachers, or the morale scores of teachers at School A. No data gathered in this study provided an answer to this question. But teachers at other schools seemed to have developed a greater responsiveness to the attitudes of their communities.

It seemed to be that a good deal of scope existed for parents, students and teachers to collaborate to develop a system of local education which would reflect more closely the expectations of the parents and students, and which would allow teachers to use their skills more effectively to provide more satisfying, more relevant and more valuable educational experiences for students.

The section which follows examines the level of Teacher Morale in relation to factors in the school, and in the personal life of teachers, which may have influenced the level of teacher morale.

INFLUENCES ON TEACHER MORALE

Attention has already been given to the multi-dimensional nature of Teacher Morale. Halpin and Croft earlier recognized the existence of factors outside the school environment which could influence the state of the organizational climate. Bentley and Rempel recognized the complexity of teacher morale, when constructing the Purdue Teacher Opinionaire, by identifying ten factors which contributed to the level of Teacher Morale. These factors were concerned with the level of interpersonal relations with the Principal, students and other teachers in the school, with the teacher's satisfaction with his working conditions, with his professional concerns about curriculum, his acceptance into the community, and his perceptions of the community as supportive or directive of the school's activities.

Examination of the influences on Teacher Morale was divided into two categories which dealt with the influence of the school environment and second, the influence of factors in the personal background of teachers which may have contributed to their level of morale. The first of these categories was investigated as Problem 3.1.

Problem 3.1

> "What factors within the school environment influence the level of Teacher Morale?"

The ten factors of the Purdue Teacher Opinionaire were used to analyse the significance of the difference between the factor scores of teachers who achieved "high" or "low" morale scores. Teachers were divided into two groups according to whether their total morale score fell above or below the median score on Teacher Morale for teachers in their school. The selection of the median was made necessary owing to the small numbers of teachers in each school and the imbalance in group size which resulted when teachers were divided into "high" and "low" groups on the basis of their total score in relation to the mean score for teachers in their school. The use of the median, as a selection criterion, while providing more balanced groups for statistical analysis, provided a distortion by placing teachers in categories which, on their relationship to the mean score, would have been inappropriate. The results of the analyses, therefore, do not represent an accurate analysis of those factors which may influence teacher morale but provided, instead, a guide which may have value in future studies.

A comparison of the mean and median scores in the four schools is presented in Figure 10.

Figure 10

Comparison of Mean and Median Scores
on Teacher Morale in all Schools

	School A	School B	School C	School D
Mean	351.0	320.4	327.2	313.6
Median	354.5	332.5	317.5	305.5

The scores for teachers on Teacher Morale were divided, at the median point of the total scores, into groups of "high" and "low" morale for each school. The factor scores for each group were subject to analysis of variance to determine whether the variations from the mean for each group of scores was sufficiently great to be statistically significant. The results of this analysis are presented in Table 52.

In School A, six factor scores for each group differed sufficiently from the mean as to be statistically significant. These were the factors Teacher Rapport with the Principal, Rapport among Teachers, Teacher Salary, Curriculum Issues, Community Support of Education, and School Facilities and Services.

In School B, only three factors were found on which the difference between the means for each group were statistically significant. These factors were Satisfaction with Teaching, Teacher Status, and Community Support of Education.

In School C, seven factors were found in which the difference between the means of each group were statistically significant. These factors were Teacher Rapport with Principal, Rapport among Teachers, Teacher Salary, Curriculum Issues, Teacher Status, Community Support of Education, and School Facilities and Services.

In School D, the differences between the means of each group were found to be significant for each factor.

On the basis of the data presented in Table 52, it appeared evident that different factors contributed to the teacher morale scores in each of the four schools. Factors which were common to all schools, in the influence they exerted on Teacher Morale, were Community Support of Education and to a lesser extent Teacher Rapport with the Principal. The Factor, Teacher Rapport with the Principal, came close to being common to all schools but the level of significance achieved in School B was $p = .06$, which was slightly below the level required for statistical

Table 52

Analysis of Variance Between Factor Scores on Teacher Morale
in Groups of High and Low Morale Teachers
By School
*Group with higher mean indicated thus: 8.14 ^{H}

	School A		School B		School C		School D	
	F	p	F	p	F	p	F	p
Factor 1	8.14 ^{H}	.017			8.60 ^{H}	.015	24.14 ^{H}	.000
Factor 2			5.10 ^{H}	.053			9.34 ^{H}	.005
Factor 3	15.97 ^{H}	.002			6.11 ^{H}	.033	4.25 ^{H}	.049
Factor 4	6.74 ^{H}	.026			6.97 ^{H}	.024	19.75 ^{H}	.000
Factor 5							12.70 ^{H}	.001
Factor 6	13.73 ^{H}	.004			8.00 ^{H}	.018	11.23 ^{H}	.002
Factor 7			6.52 ^{H}	.034	24.81 ^{H}	.000	24.89 ^{H}	.000
Factor 8	9.30 ^{H}	.012	8.07 ^{H}	.022	10.10 ^{H}	.009	11.07 ^{H}	.002
Factor 9	13.24 ^{H}	.004			8.26 ^{H}	.016	11.75 ^{H}	.002
Factor 10							6.54 ^{H}	.016

significance. Factors which were common to two schools were Rapport among Teachers, Teacher Salaries, Curriculum Issues, Teacher Status in the Community, and School Facilities and Services.

Teacher Morale appeared to be strongly influenced by a mixture of professional, economic, inter-personal and community factors, with the factor of Community Support of Education being seen as contributing most strongly to the level of Teacher Morale while the factors Teacher Rapport with Principal, Rapport among Teachers, Teacher Status in the Community, Curriculum Issues, Teacher Salaries, and School Facilities and Services contributed to a lesser extent to the final level of Teacher Morale.

Problem 3.2

> "What factors in the personal background of teachers appear to be related to the level of Teacher Morale?"

Examination of the personal factors in the background of teachers, school by school, did not yield any pattern which appeared to relate to Teacher Morale. This was thought to be due to the small number of teachers employed in three of the four schools. Accordingly, the data for all teachers were merged as one group with all "high morale" and "low morale" teachers identified in the individual schools being retained as members of the "high" and "low" groups.

The responses of both groups of teachers were subjected to a Chi-Square test of significance to determine whether the observed differences between the responses resulted from the operation of chance factors. An arbitrary criterion was set for the tabulation of results. Only those responses which yielded probability levels less than p = .10

were included in Table 53, which presented the results of the Chi-square analysis. Only 11 of the 25 items of personal data solicited from teachers were found to be statistically different when the scores of the "high" and "low" morale groups were compared. The following pattern of responses emerged.

Teachers with high morale tended to be older teachers who had resided longer in the area than other teachers. They also tended to have a slightly higher level of home ownership than did teachers with low morale. Twice as many women teachers belonged to the high morale group than belonged to the low morale group. The husbands/wives of high morale teachers were more likely to work and to be employed in the County. Wives/husbands of low morale teachers were more often employed outside the County.

Teachers with high morale had generally received fewer years of teacher education, but had taught for more years than teachers with low morale. In addition, they had taught for longer periods of time in the County schools. They were more satisfied with the amount of information about the school that was available to the community and saw the school as the major medium by which information about the school was transmitted. This view was in contrast to that of the low morale teachers who were more dissatisfied with the information available to the community and who saw the information being disseminated by the more informal means of student and neighbour transmission.

High morale teachers were more involved in the social, service and church activities of the community, and knew more parents socially--but not to a significant extent. Low morale teachers, on the other hand, were significantly more involved in the sporting activities of the

Table 53

Chi-Square Test of Significance Between Teacher Morale and Personal Data of Teachers
Based on Two Groups of "High" and "Low Morale" Teachers in all Schools
(Group with higher mean indicated thus: 8.316^{H})

Variable	Chi-Square	Degrees Freedom	Level of Probability
Years of Residence in Area	8.316^{H}	4	.080
Home Owner Status	6.257^{H}	3	.099
Age of Teacher	9.003^{H}	4	.061
Sex of Teacher	3.528^{H}	1	.060
Husband/Wife employed in County	8.599^{H}	2	.013
Husband/Wife a teacher	6.511^{L}	2	.038
Years of Teacher Education	7.911^{H}	2	.019
Years of Teaching Experience	10.476^{H}	4	.033
Years of Teaching in County	8.913^{H}	4	.063
Media for disseminating school news	10.154^{L}	4	.038
Involvement in Sporting Activities	7.567^{L}	2	.023

community. However, it should not be assumed that the differences just described were attributable solely to the level of teacher morale. Other factors, such as the younger age of low morale teachers, could be cited to account for many of the observed differences. All that was established by the Chi-square analysis was that the observed differences were not due to the operation of chance factors.

Summary

Analysis of the responses of teachers selected on the basis of their high or low scores on the Teacher Opinionaire indicated that certain factors appeared to contribute more than others to the total morale scores. Factors which appeared to contribute most to the level of morale in the majority of schools related to Teacher Rapport with Principal, Rapport among Teachers, Teacher Status in the Community, Curriculum Issues, Teacher Salaries and School Facilities and Services. In all schools, the responses of teachers indicated that the factor Community Support of Education was a strong influence on the overall level of Teacher Morale.

When the personal characteristics of teachers were analysed to produce a profile of a "high morale teacher," the figure sketched was one of maturity, financial security and close involvement with the life of the community through long years of residence. There is little question that the long-term teachers in the County made valuable contributions to local education during their years of service. Whether they had been able to keep abreast of professional developments in education during these years was not investigated in this study. However, the extent to which they had been unable to keep abreast of educational developments, or the readiness with which they considered or accepted new ideas, may have had a bearing on the lower morale scores recorded by some of the younger teachers. Similarly, the extent to which inflexibility and rigidity of thinking existed among the older teachers may have influenced the lower levels of satisfaction among some of the students.

The section which follows analyses the influence which factors in the personal lives of students may have exerted on the levels of student satisfaction.

INFLUENCES ON STUDENT SATISFACTION

Students and teachers participated in the school at different levels of involvement. Teachers were involved in a variety of roles which influenced their behavior in and attitudes towards the school. The involvement of students was not so complicated. They were there as students to be "educated" and as community members, and the level of satisfaction they expressed towards the school probably stemmed from their experience in it and reflected the value they attached to the experience.

Student satisfaction was measured on a five factor scale which took account of student attitudes towards the interpersonal relations within the school, the atmosphere of the school and the way it blended with the community, the attitude of the teachers and the instructional atmosphere of the school. The final factor related to the student's need to be recognized as an individual in his own right.

Examination of the influences on Student Satisfaction was divided into two categories which dealt with the influence of the school environment and second, the influence of factors in the personal background of students which may have influenced their level of satisfaction. The first of these categories was investigated as Problem 4.1.

Problem 4.1

> "What factors within the school environment influenced the level of Student Satisfaction?"

The five factors of the Student Satisfaction Scale were used to analyse the significance of the difference between the means of the factor scores of students who achieved "high" and "low" satisfaction scores. Students at each school were divided into two groups according to whether their total satisfaction scores fell above or below the mean score on Student Satisfaction for students in their school. The mean score was used as the dividing point for students, as distinct from the use of the median for teachers, because the greater numbers of students in each school provided sufficient numbers of students in each group to allow for meaningful statistical analysis.

The two groups of students were designated as "high" and "low" satisfaction students, according to the relationship of their total score to the mean score of all students in their school. The factor scores for each group of students were subjected to analysis of variance to determine whether the variation from the mean for each group of scores was sufficiently great to be statistically significant at the level $p = .05$. The results of this analysis are presented in Table 54.

In all schools, the five factors of the Student Satisfaction Scale were found to yield significant differences between students with high and low levels of satisfaction with their school experience. The factors which yielded the lowest levels of significance, while being

Table 54

Analysis of Variance Between Factor Scores on Student Satisfaction
in Groups of High and Low Satisfaction Students
By School
*Group with higher mean indicated thus: 42.04 ^{H}

	School A		School B		School C		School D	
	F	p	F	p	F	p	F	p
Factor 1	42.04 ^{H}	.000	92.06 ^{H}	.000	114.06 ^{H}	.000	219.14 ^{H}	.000
Factor 2	12.09 ^{H}	.001	35.84 ^{H}	.000	60.82 ^{H}	.000	187.07 ^{H}	.000
Factor 3	44.41 ^{H}	.000	43.30 ^{H}	.000	76.44 ^{H}	.000	183.00 ^{H}	.000
Factor 4	31.98 ^{H}	.000	41.77 ^{H}	.000	72.80 ^{H}	.000	120.26 ^{H}	.000
Factor 5	4.35 ^{H}	.043	11.00 ^{H}	.001	15.24 ^{H}	.000	63.50 ^{H}	.000

statistically significant beyond the level p = .05, were Factors 2 and 5 in School A, and Factor 5 in School B.

Factor 2 was concerned with the Institutional Atmosphere of the School and stressed the attitudinal relationship which existed between the school and the community, the teachers and the students, and extent to which the needs of the students seemed to be secondary to the institutional needs of the school. Student responses in School A indicated that they were less sharply divided on this ussue, in terms of their factor scores on Student Satisfaction, than they were on other factors relating to their school experiences.

Factor 5 of the Student Satisfaction Scale was the weakest of the five factors and, because it depended on student responses to two questionnaire items, was subject to greater fluctuation than the other factors. Factor 5 was concerned with Student Identity and the desire of students to identify with their peers and to be accepted within the school as individuals in their own right. In a sense, the quality of student relationships within the school was also implicit in this factor for the responses of students to this factor depended, in one instance, on the extent to which they agreed that students in the school were a "great bunch." To the extent that ethnic, linguistic or cultural differences may have influenced student responses to this item, the ability of the item to measure student identification with his peers may have been prejudiced by the presence of these unanticipated variables.

Problem 4.2

> "What factors in the personal background of students appeared to be related to the level of Student Satisfaction?"

The personal data in the background of students were examined to determine whether a profile of characteristics could be developed which typified students of high and low satisfaction.

The responses of both groups of students in the four schools were subjected to a Chi-square test of significance to determine whether the difference between the responses of students in each group were such that they could be attributed to the operation of chance factors. The results of this analysis are presented in Table 55. The level of probability at which observed differences between scores were regarded as statistically significant remained the same as for the analysis of teachers' background data, namely p = .10.

When the responses of students with high and low scores in all schools were compared, eleven of the fifteen items of personal data solicited from students were found to be significantly different in one or more of the schools.

In Schools A, C and D, students with high satisfaction scores were agreed that teachers should live and teach in the same community. Students in School B with low satisfaction scores were more in favor of this proposition than students with high satisfaction scores, but the difference between the two groups was not statistically significant. Low satisfaction students in School B also demonstrated a strong involvement in the sporting activities of the community, though not to a significant extent. Whether their interest was associated with their views on teacher residence, or with the fact that 70 percent of the teachers at the school were involved in community sporting activities, could not be determined.

Table 55

Chi-Square Test of Significance Between Student Satisfaction and Personal Data of Students
Based on Two Groups of "High" and "Low" Satisfaction Students
School by School
(Group with higher mean indicated thus: 10.89 ^{H})

Variable	Degrees Freedom	School A		School B		School C		School D	
		Chi-Square	p =	Chi-Square	p =	Chi-Square	p =	Chi-Square	p =
Future plans of Student	2			8.53 ^{H}	.036			6.74 ^{L}	.080
Age of Student	2			5.14 ^{H}	.076	8.74 ^{H}	.033		
Grade of Student	2			5.02 ^{H}	.081				
Interest in Extra-Curricular Activities	4							19.00 ^{H}	.000
Satisfaction with information to parents	4	10.89 ^{H}	.027	7.78 ^{H}	.099				
Media for disseminating school news	3			8.54 ^{L}	.036				
Teachers should live and teach in the same community	3	6.98 ^{H}	.072			9.25 ^{H}	.054	10.87 ^{H}	.028
The number of teachers known socially	4			12.05 ^{H}	.017				
Involvement in Social Activities	2					7.84 ^{L}	.019		
Involvement in Service Activities	2							8.25 ^{L}	.083
Involvement in Church Activities	2	2.92 ^{H}	.087						

Students with low satisfaction in School D indicated, in a manner which was significantly different from the responses of high satisfaction students, that they intended to leave the district in the near future. At the same time, high satisfaction students in School B made similar responses. Reference to the raw data relating to student responses, contained in Appendix F, indicated that of all students in Schools B and D who stated their intention to leave the district in the near future, 23 percent were enrolled in Grade 10, 92.8 percent in Grade 11 and 66.7 percent in Grade 12 in School B, and 31.8 percent, 50.6 percent and 61 percent in Grades 10, 11 and 12 in School D. The surprising feature of these responses was the large proportion of Grade 11 students in School B who planned to leave the district. A more understandable pattern of responses was provided by students in School D, where the proportion of students who planned to leave increased the closer they came to the end of their schooling. No explanation can be provided from the data gathered in this study to account for the responses of students in School B.

Students with high satisfaction scores tended to be younger than students with low satisfaction scores and, in School B tended to be in Grades 10 and 11. Female students generally displayed higher levels of satisfaction with school than did male students, but in none of the schools was the difference sufficiently great to be statistically significant.

In Schools A and B, high satisfaction students expressed their satisfaction with the amount of information available to their parents. Their responses were significantly different from those of students with lower levels of satisfaction. In their assessment of the different media for disseminating information, high satisfaction students saw students as being most important in the dissemination process but placed the activities of the school only slightly below in importance, while newspapers and other media received only token attention. Low satisfaction students, by contrast, gave students a far greater level of importance and relegated the school in the dissemination process to a far lower level of importance, in fact on equal footing with newspapers and other media.

High satisfaction students in School B knew more teachers socially than did the low satisfaction students, but even then 20 percent of the high satisfaction students reported that they knew no teachers socially. In none of the other schools was the difference between the responses of high and low satisfaction students on this item statistically significant.

In School D, high satisfaction students were more interested in extra-curricular activities than low satisfaction students. But low satisfaction students were more involved in service activities in the community than were high satisfaction students. The responses of both sets of students to these items were statistically significant, as was the response of high satisfaction students in School A who reported involvement in the church activities of the community.

No clear cut profile emerged from the responses to these questions which could be used to typify students with high or low levels of student satisfaction. On the basis of the data in Table 55, the high satisfaction student favored teachers living in the community in which they taught, [illegible] satisfied with the information available to his parents and tended to [illegible] younger and to have more female than male members among the group.

This fragmentary profile indicated the difficulties of stereotyping students as high or low in satisfaction on the basis of their resemblance to certain characteristics. At the same time, on the basis of the variety of activities in which low satisfaction students were involved, there appeared to be no single satisfactory method by which the interests of low satisfaction students could be engaged in school or community activities. The data suggested that what appealed to students in one area did not appeal to students in other areas.

The implications of these findings would seem to discount the value of set responses to set situations in dealing with the problem of how to improve the quality of students' school experience. A good deal appeared to depend on the interest and initiative of teachers to explore ways of involving low satisfaction students in school and community activities which would provide opportunities for their social and personal development, and which could lead, in time, to the kindling of greater interest in their educational development.

The following section examines the relationship between the personal background data of parents and the satisfaction of students.

Problem 4.3

> "What factors in the personal background of parents appear to be related to the level of Student Satisfaction achieved by their children?"

The personal data of parents were examined to determine whether any profile of characteristics existed which would better describe parents of students with high and low levels of student satisfaction.

Parents were placed in "high" and "low" categories according to whether their children's scores on the Student Satisfaction Scale had placed them in high or low satisfaction groups. For ease of comparison, parents were also "assigned" to the schools attended by their children.

The responses of both groups of parents in the four schools were subjected to Chi-square tests of significance to determine whether the difference between the responses of parents in each group were such that they could be attributed to the operation of chance factors. The results of this analysis are presented in Table 56. The level of probability at which observed differences between scores were regarded as statistically significant remained the same as for the analysis of teachers' and students' background data, namely p = .10.

When the responses of parents in the high and low categories in all schools were compared, only five of the twenty-one items of personal data solicited from parents were found to be significantly different. No factor was found which was statistically significant in more than one of the schools.

Parents in the high satisfaction group in School A were older, to a significant extent, than parents in the low satisfaction group. They were also significantly more satisfied with the amount of information available to them about the school than were parents in the low satisfaction group.

In School B, parents in the low satisfaction group reported that they were more frequent visitors to the school to discuss their children's educational progress than were parents in the high satisfaction group. They also reported that they were more active in the social activities of the communities. In both cases the differences between

Table 56

Chi-Square Test of Significance Between Student Satisfaction and Personal Data of Parents Based on Two Groups of Parents Selected on the Basis of the High or Low Scores of Their Children on the Student Satisfaction Scale School by School

(Group with higher mean indicated thus: 19.845 ^{H})

Variable	Degrees Freedom	School A Chi-Square	School A p =	School B Chi-Square	School B p =	School C Chi-Square	School C p =	School D Chi-Square	School D p =
Age of Parents	3	19.845	^{H}.000						
Satisfaction with Information about the School	4	12.181	^{H}.016						
Frequency of visits to the School	3			10.444	^{L}.033				
Satisfaction with visits to the School	3					8.771	^{H}.067		
Involvement in Social Activities	2			8.038	^{L}.018				

the scores of the high and low satisfaction groups of parents was statistically significant.

In School C, only the responses to one item of personal background data reached the required level of significance. On this item, high satisfaction parents reported greater satisfaction with their visits to the school than did parents in the low satisfaction group.

The educational level of parents did not emerge as a significant item of background data in this study. But in all schools, parents of high satisfaction students tended to have higher levels of education than did the parents of students with low levels of satisfaction. It was not possible, from the data gathered in this study, to determine whether a causative relationship existed between the educational level of parents and the satisfaction of students. The earlier work of Knill (1961) indicated a relationship between the education of parents and their attitude towards the school. He found that people with more education tended to be more supportive of the school than people with less education. Were this to be the case in this study, where 83 percent of the students lived with their parents, it would be reasonable to suppose that some of the parents' attitudes towards the school would be transmitted to the students and would be reflected in the scores on student satisfaction. Knill also found that parents in higher levels of employment were more supportive of the school than parents in lower forms of employment. In Schools B and C, parents with high level jobs had high satisfaction students. In School D there was no observable difference between the groups of parents, while in School A, the parents with the high level jobs had students with low levels of satisfaction. In none of these instances did the differences between each group reach the required level of significance.

Summary

Analysis of the responses of students to the five factors of the Student Satisfaction Scale revealed that on each of the factors the scores recorded by the students with high and low levels of satisfaction were sufficiently different to achieve levels of significance greater than p = .05.

Examination of the personal data of students indicated that, in three of the four schools, students believed that teachers should live and teach in the same community and, by inference, should become an integral part of the community. By contrast, this factor did not emerge as a significant issue when the background data of teachers were analysed.

Other background data of students suggested that satisfaction with school seemed to be greater among younger students and that with increasing age satisfaction with school was likely to decrease. The amount of information available to parents achieved statistical significance as a factor related to the satisfaction of students in two of the four schools. But students and teachers differed in their choice of the media by which the information was disseminated. Teachers tended to regard the school as the focal point for disseminating information. Many students perceived themselves as the key figures in the information network. These differences in viewpoint have implications for the manner in which the school is perceived for, if the informal or student centred channels of communication are more effective than the formal or school centred channels, the perceptions of the school come to be based on its actual performance rather than its promise of performance or its public relations activities. These findings, though not statistically significant, lend support to the argument of Williams (1969) who pointed to the weaknesses implicit in the development of public relations policies for schools. He argued that since they projected an unreal image of the school, through a centralized agency, local initiative for relating to the clientele of the school was impaired and the school was unable to cope with the realities of an unsympathetic or hostile community. In Williams' view, there was need for closer personal contact between the school and its clients. Students in this study seemed to be conveying the same message.

Few factors emerged from the personal background of parents which could provide a profile of parents whose children were satisfied with their educational experience. The level of student satisfaction seemed to depend more on the atmosphere and activities of the school than on the personal characteristics of parents. However, there was some indication that children of less educated parents, who held low level jobs, may have a more negative attitude towards school than children of more advantaged parents. To the extent that Coleman's thesis is valid, that disadvantaged children view the school environment as "random and immovable", it may be appropriate for teachers to spend more of their time demonstrating the relevance of education to disadvantaged children and to be less preoccupied with the transmission of subject content for its own sake.

This chapter analysed the data gathered in this study in relation to the four major problems investigated. The first problem examined the relationships existing between the perceptions of the school held by students, parents and teachers. The results disclosed that the perceptions of the school held by students and their parents varied from school to school yet maintained a reasonable amount of agreement.

When the results from the four schools were merged, the correlations between Parent Perception and Student Satisfaction were positive and statistically significant on five of the factors compared. A canonical correlation which compared the clusters of factors produced four correlations which were highly significant and one which was not.

The relationship between the perceptions of teachers and students yielded correlations which ranged from not significant to near significant and, in a few cases, above the level of significance required. A small number of correlations between Teacher Perception and Student Satisfaction were positive and significant in three schools, but correlations in the fourth school were mostly negative in direction but not statistically significant. These results demonstrate slight but not universal agreement between students and teachers on the ability of the school to provide a satisfying educational experience. When the results from all schools were merged, no significant positive correlation was found between Teacher Perception and Student Satisfaction. Although 52 percent of the correlations recorded were negative in direction none were significant in size. Similarly, the canonical correlation between the clusters of factors scores for Teacher Perception and Student Satisfaction yielded no correlations of significant size.

The relationship between Parent Perception and Teacher Perception yielded correlations in three schools which were below the required level of significance, but which were positive in direction. In the fourth school, a number of correlations were both positive and significant. When the results of all schools were considered, no significant correlations were found between the perceptions of parents and the perceptions of teachers. While some negative correlations were recorded between the perceptions of parents and teachers, none were statistically significant. None of the canonical correlations was statistically significant.

The second problem investigated the relationship between Teacher Morale and Student Perception. In two schools, no significant relationship was found but a number of correlations approached the level of significance. In the other two schools correlations were mostly positive and many approached or exceeded the level required for statistical significance. When the results from all schools were merged, 62 percent of the possible correlations were negative and some were statistically significant. No significant positive correlations were recorded. These relationships were reflected in the canonical correlations which failed to yield any statistically significant results.

The relationship between Teacher Morale and Parent Perception was negative and significant in two schools, while two schools recorded positive and significant correlations. In all schools negative correlations were recorded but not all of these were statistically significant. The correlation matrix for all schools yielded inter-correlations which were mostly negative and where only one of the seven significant correlations was positive. However, statistically significant canonical correlations were found between two pairs of new composites.

The relationship between Teacher Morale and Teacher Perception was mainly positive and significant. When the results from all schools were merged, the correlations were positive and significant in 70 percent of the cases. When canonical correlations were calculated between the clusters of factor scores, only one was found to be significant.

The third problem investigated the factors in the school environment which related to Teacher Morale. In different schools different combinations of factor scores were found to be significant when the responses of "High Morale" and "Low Morale" teachers were compared. Factors found to be significant in most schools related to Teacher Rapport with Principal, Satisfaction with Teaching, and Community Support of Education.

Background factors in teachers' lives which were significantly related to Teacher Morale were the age and sex of teachers, their home owner status and years of residence in the area, and whether their husband/wife worked in the County. On the professional level, the years of teacher education, years of experience and the years of teaching in the County were important factors. Other factors were teacher involvement in sporting activities in the community and their perceptions of the manner in which information about the school was disseminated.

The fourth problem investigated the personal factors in the lives of students which related to their perceptions of the school. Students in three schools believed teachers should live and teach in the same community. Other responses included the students' satisfaction with the information available to their parents, the future plans of students to leave the district, and their age. In single schools, student satisfaction was related to interest in extra-curricular activities, their participation in the activities of the community and their views on the manner in which information was disseminated about the school.

Parents of the students made fewer responses which were statistically significant, and none were common to parents in other schools. The factors which emerged which differentiated between parents of students with high and low levels of student satisfaction were the age of parents, their satisfaction with the information about the school available to them, the frequency of their visits to the school and their satisfaction with the visits, and their involvement in the social activities of the community.

On the basis of these data, it appeared evident that the satisfaction of students with their school experience depended on factors intrinsic to the school rather than on extrinsic factors in their environment.

In the concluding chapter, the findings of this study are summarized and conclusions are drawn. The implications of the findings for administrators of schools are discussed and recommendations made for future research into matters related to the theme of this study.

CHAPTER VI

SUMMARY, FINDINGS, IMPLICATIONS AND RECOMMENDATIONS

This chapter reviews the preceding chapters and integrates the various strands developed throughout this study. It examines the findings and draws from them a series of implications for administrators and for the pre-service and in-service education of teachers.
To conclude this chapter, recommendations are made which relate to additional research questions which suggested themselves as a result of this study.

SUMMARY

This study was a four-part investigation of the relationship between (1) the perceptions held by students, parents and teachers of the school as a satisfying educational experience for students; (2) the perceptions held by students, parents and teachers and their relationship to the level of teacher morale; (3) those factors in the school and/or the personal background of teachers which related to their level of morale; and (4) those factors in the school and/or the personal background of students which related to the level of satisfaction students felt towards their school experience. To supplement the final aspect of this study, an analysis was made of the personal background factors of parents whose children achieved high levels of satisfaction with school. It was hoped that these data would provide a profile of parents of "high satisfaction students."

The study was conducted in the four senior high schools in the County of St. Paul, Alberta. Three instruments used to gather data from participants were the modified Purdue Teacher Opinionaire, which measured teacher morale; the Student Satisfaction Scale which measured both student satisfaction and the perceptions of parents and teachers of the school as a satisfying experience for students; and a series of questionnaires which solicited personal and demographic data from the participants.

Because each school operated under different environmental conditions and with different student populations, each school was treated as a separate organization for most analytic purposes. In some cases this policy led to small numbers of cases being used in the statistical analyses, but the prime purpose of the policy was to preserve the individuality of each school.

Three forms of data were derived from the participants of the study. First, the responses of teachers to the Purdue Teacher Opinionaire were taken as a measure of teacher morale and were analysed to provide a total morale score and ten factor scores for each teacher. Second, responses from parents, students and teachers to the items of the Student Satisfaction Scale were taken as measures of student satisfaction, in the case of students, and as measures of parent or teacher perception, and were analysed to provide a total score and five factor scores for each respondent. Intercorrelations were calculated for these data, and correlations were also calculated between the satisfaction or perception scores of students, parents and teachers and the data derived from the teacher morale scores. The personal and demographic details of the respondents, provided by the questionnaires, were used to investigate those characteristics which were related to the responses of students, parents and teachers on the measures of student satisfaction, parent and teacher perception and teacher morale. Findings derived from the use of these instruments are discussed in the section which follows.

FINDINGS

Perceptions of the School

Perceptions of the school held by parents, students and teachers varied in all schools. Only in one school were similar perceptions of the school held by parents, students and teachers. In other schools it was as though teachers were responding to an environment which only they had experienced, so much higher were their scores. In part, the differences in perception between teachers, on the one hand, and parents and students on the other, may have been due to the occupational and career links which caused the teacher to identify more closely with the school than was possible for parents or students.

The perceptions of the school held by parents and students were much more closely related than they were with the perceptions of the school held by teachers. Although some negative correlations were recorded between the perceptions of students and parents in some schools, they were mostly positive and frequently significant to the level where $p = .05$.

The degree of agreement between students and teachers, in the perceptions they held of the school, were positive in three of the schools but only marginally significant. In the fourth school, the correlations between the perceptions of students and teachers were mostly negative though not of sufficient magnitude to achieve statistical significance.

The degree of agreement between parents and teachers, in their perceptions of the school, were predominantly positive although only five significant correlations were recorded between the parents and teachers of one school.

The perception scores of teachers bore little resemblance to the scores recorded by parents and students for they were considerably higher in every respect. Only in one school were the teacher scores comparable to the scores recorded by parents and students.

Clearly, with such disparities between the perceptions of students, parents and teachers in the way they regarded the school, much work remains to be done to develop a concept of the school which is recognizable to all and which meets the expectations of all groups.

The Morale of Teachers

The comparison of mean factor scores illustrated the different rankings in teacher morale between schools. School A appeared to be the school in which teachers recorded the highest scores on teacher morale. This was the case with the total scores as well as most of the factor scores. On these bases, Schools C, B and D followed in second, third and fourth position. But comparison of the mean scores revealed little of the interplay between the personal, professional, work related and community related factors which influenced the level of teacher morale. The different numbers of items which comprised each of the factors further cloaked the intrinsic value attached by teachers to each of the factor items. The values given by teachers to each of the factors indicates the extent to which each of the factors contributed to the level of Teacher Morale in each school. To disclose these patterns, the mean scores of teachers on each factor were calculated as a percentage of the possible score for that factor. The results were ranked in descending order of magnitude. The outcomes of the comparison are presented in Figure 11.

Figure 11

Comparative Teacher Ratings on Teacher Morale Factors in each School

Teacher Morale Factors	Schools			
	A	B	C	D
Teacher Rapport with Principal	4	1	6	8
Satisfaction with Teaching	5	5	3	1
Rapport among Teachers	2	4	1	5
Teacher Salary	9	7	9	7
Teacher Load	3	2	2	2
Curriculum Issues	8	9	3	6
Teacher Status	6	6	8	10
Community Support of Education	7	8	7	9
School Facilities and Services	10	10	10	3
Community Pressures	1	3	5	4

On the basis of these rankings, teachers in School B gave greatest prominence to the factor Teacher Rapport with Principal. Teachers in School D gave most weight to Satisfaction with Teaching. Teachers in School A rated the factor Community Pressure as most important while teachers in School C placed most importance on the factor Rapport among Teachers. Only four factors were given approximately similar ratings by all teachers. These were the factors related to Teacher

Salary, Teacher Load, School Facilities and Services and Community Support of Education. The first three of these factors related to conditions of work rather than to professional, personal or community-related aspects of education. Apart from the ratings applied to Teacher Load, the ratings for the remaining factors were of a relatively low order. In terms of teacher responses to the personal, professional, and community-related factors, it was evident that teachers in each school responded in different ways to the different relations prevailing within their schools or between their schools and the community.

The ratings presented in Figure 11 demonstrated the multi-dimensional nature of teacher morale and the manner in which the factors interacted, in different combinations, to create the final picture of teacher morale. The level of teacher morale in each school depended not only on the leadership of the principal, although this was important, but on other factors inside and outside the school which influenced the teachers' response to the questionnaire items.

Teacher Morale and Perceptions of the School

The relationship between Teacher Morale and the perceptions of the school held by students, parents and teachers varied from school to school and from group to group.

The levels of Student Satisfaction in Schools B and C were positively and significantly related to the levels of Teacher Morale displayed by the teachers. In Schools A and D only one significant negative correlation was recorded between Student Satisfaction and Teacher Morale. No significant positive correlations were registered. When the levels of all Student Satisfaction were compared with the levels of all Teacher Morale, three significant negative correlations were recorded. No positive and significant correlations were registered.

Fewer significant relationships were recorded between the morale of teachers and the perceptions of parents. Five of the nine significant correlations recorded in all schools were negative in direction. Parents in Schools B and C recorded four significant positive correlations while the parents in Schools A and D were negative in their response to the morale of teachers. Parents' negative reactions focussed on the factors relating to the Personal Relations in the School, the Institutional Aspects and the Instructional Atmosphere of the School.

By contrast, the relationship between Teacher Morale and Teacher Perception was predominantly positive and significant. While some negative correlations were recorded in some schools between Teacher Morale and Teacher Perception, these were not significant, while the positive correlations were significant to the level where $p = .05$. When the morale of all teachers was correlated with the perceptions of all teachers no negative correlations were recorded and 72 percent of the inter-correlations were statistically significant.

Environmental Influences

The factors which appeared to contribute most to the level of Teacher Morale related to the Community Support of Education, Rapport with the Principal, Rapport among Teachers, Teacher Status in the Community and with factors associated with working conditions. To the extent that the factor scores reflected teacher responses to the actual conditions portrayed by the factors, the universal recognition accorded to Community Support of Education as an important influence on Teacher

Morale illustrated the importance of establishing effective relations between the school and the community. The diversities that were demonstrated between the perceptions of teachers and their level of morale, on the one hand, and the perceptions of parents and students on the other, reinforced this conclusion.

To the extent that the factor scores on Student Satisfaction reflected student responses to the conditions in the school, their responses indicated that the conditions portrayed by the five factors were important contributors to the level of student satisfaction.

In the wider community context, many students believed that teachers should live in the community in which they taught. These expressions may have reflected a desire by students for teachers to become more involved in the life and activities of the community. Some students expressed dissatisfaction at the extent of information available to the community about the activities of the school and saw themselves as an important link between the school and the community for the dissemination of information about the school to the community. To the extent that students are important sources of information about the school, the importance of student satisfaction with all aspects of the school environment assumes new importance.

The analysis of background characteristics of parents did not disclose any profile which could serve to identify parents of students with high or low levels of student satisfaction. However, there were some indications that parents who had marginal levels of education and who held low level jobs may precondition their children, consciously or unconsciously, to react to school in a manner which limited their ability to gain the fullest benefit from the educational experiences available.

CONCLUSIONS AND IMPLICATIONS

Certain conclusions can be drawn from this study which have implications for the training of new administrators, the retraining of teachers, and for the research activities of universities.

1. Students and parents expressed varying satisfaction at the extent to which the school met their educational expectations and provided a satisfying educational experience for students. Teachers, on the other hand, expressed levels of satisfaction with the school as an educational experience for students which bore little resemblance to the views expressed either by students or their parents.

These views reflect similar expressions of dissatisfaction with the state of education to those expressed earlier in the United States. There the pattern of unrest has led to increased pressures for public involvement in the decision-making processes of education to ensure that more valuable educational experiences are available to students. Such pressures for public inclusion challenge the traditional role of the school administrator as the decision-maker and educational leader. They also pose the question whether the present training of school administrators is adequate for the rapidly changing educational and environmental conditions in which they will be required to operate.

New administrators need to be trained to the reality of community involvement in education, to be responsive and sensitive to the needs and aspirations of communities, and trained to constantly test the "mood" of the community towards the school. They should also be trained to develop and to use community interest in education and to encourage community involvement in the planning and policy-making activities of the school.

Existing administrators have a more difficult task than new administrators, for the nature of the relationship between the administrator and the community has already been set. However, the skills specified for new administrators are as much required by existing administrators who need to be given the confidence and the courage to change long-established administrative styles by gaining experience in the necessary skills for the effective administration of a community enterprise.

If the proposition is accepted that effective education depends on the mutual respect and interaction of all interested groups, then it follows that the administration of education is too important a responsibility to be entrusted to the inept, though well-meaning, management of self-taught administrators.

II Students gave evidence in their responses that they welcomed the community participation of teachers and enjoyed the opportunity to work with them on community and extra-curricular activities. But when teachers assumed the role of "teacher" a change of atmosphere seemed to cloud the relationship between student and teacher. Student dissatisfaction at the personal relationships within the school, the institutional aspects, the supervisory attitude of teachers, the instructional atmosphere of the school and the degree to which students were recognized as individuals were significantly related to the level of student satisfaction with school. There seemed to be a feeling conveyed that, when the teacher/student relationship prevailed, teachers became preoccupied with their role as school officials and tended to overlook the person to person relationship implicit in the concept of the school.

It can be argued that this state of affairs was a logical outcome of the present methods of teacher training, where student teachers were given considerable exposure to the theoretical, philosophical and subject content aspects of education, and little experience in relating to students. The charge may be valid that much of the content of contemporary education is irrelevant to the needs of students, but it may equally be true that teachers who have difficulty in relating to their students would have greater difficulty in conveying to students the educational importance implicit in the subject material.

Teacher education which made greater use of field based experience, which allowed student teachers to experience the atmosphere and problems of a classroom concurrent with their courses on classroom management, would do much to endow the theoretical courses with a new relevance. Equally, it would allow student teachers to gain confidence, under the guidance of a supervising teacher, and experience in relating to students, and to develop the skill of quickly establishing rapport with students. Such an approach, which would favor the interpersonal respect between student and teacher, rather than mastery of subject content, would reverse the present emphasis of teacher training where student teachers are graded on their mastery of content but not on their ability to relate to students.

Such an approach as that proposed above would probably lead to higher attrition rates among student teachers than the present system. Student teachers would be able to decide, on the basis of their experience with students in the classroom, whether they were suited to a career of teaching. By contrast, the present system--through inadequate exposure of student teachers to the real world of the classroom--allows an individual to train for a career for which he may be emotionally unsuited.

While the attrition rate among student teachers would likely increase, it can be argued that the teachers produced by a field-based system of teacher education would be better equipped to teach through their ability to relate more readily to the students they were to teach.

Teachers already in the classroom would need to have opportunities, through in-service education, to relate to students in situations where the traditional teacher/student relationships were not applicable. While some teachers would benefit from the opportunities to relate to students on a personal level some would continue to demonstrate their inability to achieve or to maintain satisfactory rapport with students. For teachers such as these, provisions should be made for retaining to careers where the ability to relate to students was not an essential pre-requisite. The ability of teachers to relate to students, and to provide for their affective development, appears now to be equally as important as their ability to cater to the cognitive needs of students.

III Teachers gave evidence, through their morale scores, that the level of their morale depended on the interaction of a number of factors inside the school and in the community outside. If it is accepted that the morale of teachers is the responsibility of the principal to maintain--as part of upholding the general tone of the school--it follows that the principal should be competent to analyse the level of morale among teachers; to identify those factors which may be contributing to lower levels of morale, and to be competent to effect those changes which could lead to the desired improvements.

Administrators of schools and school systems need to have the ability to identify the low points in the morale structures of their organizations and the personal confidence to investigate situations within the school which may evoke criticism of their administration. Evidence in this study has emphasized the importance of the human interaction in determining the effectiveness of the school as an educational experience for students and as a community enterprise. The selection of school administrators has tended to favor those who have already demonstrated skills in the management of some aspect of the physical resources of the schools. Not always has attention been focussed on the ability of administrators to develop cohesive teams of educators which have the ability to provide a balanced education for students by paying attention to their affective as well as their cognitive needs.

It is important to realize that, at a certain level of administrative responsibility, the ability to manage the physical resources of the organization becomes subordinate to the ability to manage the human resources of the organization. That is not to say that the human side of the enterprise is emphasized while the management of the physical resources is ignored. But an administrator, skilled in developing the human potential of his subordinates, would have little difficulty in delegating responsibility and authority to subordinates, as part of their growth experience, for the management of key aspects of the enterprise. While these skills are acquired attributes, they require a good deal of trust and self-confidence from administrators who may believe that, in delegating responsibility and authority to subordinates, they are eroding their base of authority and abrogating their responsibility to provide leadership.

To develop these skills, and to gain a sufficient level of self-assurance, administrators need a good deal of assistance through programs of in-service and pre-service education, and through special programs of graduate study in Educational Administration.

IV Universities have a responsibility to provide the leadership, the immediate assistance and the long-term developmental programs needed to produce administrators competent to manage the physical resources of the schools and to develop to the fullest the human potential of the students and the teachers who work in them.

Through their unique position, universities are able to provide objective insights into the operation of the schools and to provide guidance and leadership to administrators to improve the efficiency and effectiveness of the educational enterprise. The opportunity to provide leadership and training rests upon the ability and the willingness of universities to conduct systematic research into the current and emerging problems of education. They also have a responsibility to develop and field test instruments which would allow administrators to conduct progressive diagnoses of their organizations with a view to effecting necessary improvements in their performance.

Universities, especially Departments of Educational Administration, have a responsibility to provide a balanced blend of theoretical knowledge and practical experience in programs of field-based research into educational problems. Administrators who undergo courses of post graduate education have reason to expect that they could develop competence and receive expert guidance in the latest methods of investigating problems associated with the management of the human and physical resources of the school. Of considerable value to administrators would be the ability to participate in on-going programs of research related to problems of school-community interaction. While administrators may be proficient in matters of internal management, evidence suggests that much of the friction generated between school and community results from the reluctance or the inability of administrators to face the problems posed by their communities. Reference was made earlier to reported misperceptions by administrators of the purpose and intent of community interest in education. Through inept administrative handling of the issues, hostility was generated between school and community under conditions which, with enlightened handling, could have led to fruitful interaction between the community and the school.

School administrators, in the course of their daily duties are too close and too involved in the problems of the school to be completely objective in their reactions to them. Universities, because of their detached position, are ideally situated to provide expert consultative services to school administrators, as an extension of their normal function, and so make a valuable contribution to the improvement of public education.

RECOMMENDATIONS

During the course of this study certain of the results indicated the need for more specialized research into related areas. This section of the chapter proposes certain areas in which further research could be conducted.

It became evident during the study that the Student Satisfaction Scale, which was a satisfactory measure for identifying students with high and low levels of student satisfaction, lacked the refinement necessary to give it precision as a diagnostic tool. To some extent, these shortcomings derived from the origins and manner of development of the instrument as a student-based measure. However, the results achieved during this study indicated the need for further development in specific areas to provide greater diagnostic capability, of a practically useful nature, than it presently possesses.

There is need for studies to be undertaken to develop a diagnostic tool for principals which would enable them to gather feedback on the effectiveness of their administrative activities and their inter-personal relations. Given the status differential between principals and teachers it is unreasonable to expect that teachers would feel secure enough to bring to the notice of the principal certain patterns of his behavior which adversely affected the tone of the school or the internal harmony of its inter-personal relations.

Similarly, there is need for some medium of exchange to be developed between school and community to sensitize the principal to the needs of the community, to appraise him of community reactions to school activities and performance, and to allow him to direct the activities of the school more effectively to meet the needs of the students and the community.

Students in this study demonstrated declining levels of student satisfaction with school as their age and grade levels increased. Because the attitudes students displayed towards the school, in their final years, probably has a bearing on their readiness to undergo later programs of post-secondary education, it is important to discover the reasons for student dissatisfaction. Studies oriented to analysing and identifying the changing, age related, levels of student satisfaction, and their probable causes, could do much to improve the attitudes of students towards school and greatly improve their attitudes towards subsequent, career related, educational experiences.

This study yielded evidence which indicated the interplay of different factors which influenced the level of teacher morale. It would be of great value to administrators to know which factors exerted the greatest influence on the level of teacher morale. It would be of value, for example, to know whether improvements in the working conditions of teachers or improvements in their interpersonal relations would improve their level of morale and have beneficial results on the relations of the school to the community.

Evidence suggested that one of the influences related to the level of parent satisfaction with the school was the amount of information they had about the school. Little research effort appears to have been directed to identifying that information about the school which is of greatest interest and value to the community. There is need to bridge the communications gap between school and community before mutual trust and understanding between each group can be fully achieved. At the same time, principals need to be able to gauge the mood of the public to determine the level of acceptance that proposed innovations are likely to receive, and also to make the school more responsive to the expressed needs of the community.

Allied to the preceding point is the need for studies to be conducted to identify the areas where community expertise, for example in the areas of administration and finance, could be utilized to effect greater school efficiency. Traditionally, educators have been "expert" in every sphere of activity and, on this premise, have acted with little regard to the views, values or aspirations of the community. It has become increasingly clear that the omni-capability of school principals and administrators has been challenged and that community pressures for greater consultation or inclusion in the policy making activities of the school make confrontation or collaboration inevitable. It would seem to be of value for administrators to know the nature and extent of community needs for inclusion in the administrative activities of the school. Through joint discussion it would be possible to negotiate workable patterns of integration which would allow the school to operate effectively, in performing its professional activities, and would allow the community to participate to make the educational activities of the school a valued and satisfying segment of community life.

BIBLIOGRAPHY

Ables, J., and Conway, J., "Leader-Team Belief System Congruence and Relationships to Morale within Teaching Teams," Educational Administration Quarterly, 1973,9:22-23.

Anderson, B., and Tissier, R.M., "School Class, School Bureaucratization and Educational Aspirations," Educational Administration Quarterly, 1973,9:34-49.

Andrews, J.H.M., "What School Climate Conditions are Desirable?" The CSA Bulletin, 1965,4:4-20.

Barnes, L.B., Greiner, L.E., and Leitch, P., "The Simple Complexity of Organizational Climate in a Government Agency," from Renato Taguiri and George H. Litwin, (eds.) Organizational Climate--Explorations of a Concept, Boston, Harvard School of Business Administration, 1968.

Bentley, R.R., and Rempel, A.M., Manual for the Purdue Teacher Opinionaire, West Lafayette, Ind., The Purdue Research Foundation, 1970.

Bonner, H., Group Dynamics: Principles and Applications, New York, Ronald, 1959.

Boyan, N.J., "The Emergent Role of the Teacher in the Authority Structure of the School," from R. Allen and J. Schmid, (eds.) Collective Negotiations and Educational Administration, University of Arkansas Press, Fayetteville, Arkansas, 1967.

Brickner, C.E., "An Analysis of Organizational Climate and Leader Behavior in a North Dakota School System," Unpublished Ph.D. Dissertation, The University of North Dakota, 1971.

Bridges, E.M., "Subjective and Objective Aspects of Demands for Involvement," Administrator's Notebook, 1969,17,6.

Brown, R.J., "Identifying and Classifying Organizational Climates in Twin Cities Area Elementary Schools," Paper presented at American Educational Research Association meeting, Chicago, 1965. Quoted in Halpin, A.W., "Change and Organizational Climate," The Journal of Educational Administration, 1967,5:5-25.

Burton, W.H., and Brueckner, J.L., Supervision, A Social Process, 3rd edit., N.Y., Appleton, Century-Crofts, 1955.

Coleman, J.S., Equality of Educational Opportunity, U.S. Department of Health, Education and Welfare, U.S. Government Printing Office, Washington, 1966.

Cooley, W.H., and Lohnes, P.R., Multivariate Data Analysis, John Wiley and Sons, Inc., New York, 1971.

Cunningham, L.L., "Community Involvement in Change," *Educational Leadership*, 1970, 27:363-366.

Cunningham, L.L., "Leadership and Control of Education," from Edgar L. Morphet and Charles O. Ryan, (eds.) *Designing Education for the Future, No. 2.*; *Implications for Education of Prospective Changes in Society*, New York, Citation Press, 1967.

Darlington, R.B., Weinberg, S.L., and Walberg, H.J., "Canonical Variate Analysis and Related Techniques," *Review of Educational Research*, 1973,43,4:433-454.

Doak, E.D., "Organizational Climate: Prelude to Change," *Educational Leadership*, 1970,27:367-371.

Duggal, S.P., "Relationship between Student Unrest, Student Participation in School Management, and Dogmatism and Pupil Control Ideology of School Staff in High School," Unpublished Ph.D. Dissertation University of Michigan, 1969.

Dyer, H.S., "The Measurement of Educational Opportunity," from Frederick Mosteller and Daniel P. Moynihan, *On Equality of Educational Opportunity*, New York, Randon House, 1972.

Ellenberg, F.C., "Factors Affecting Teacher Morale: Meaning for Principals," *Educational Administration Quarterly*, 1972,56: 37-45.

Fantini, M.D., "Community Participation: Many Faces, Many Directions," *Educational Leadership*, 1972,29:674-680.

Ferguson, G.A., *Statistical Analysis in Psychology and Education*, McGraw-Hill Book Company, New York, 1966.

Glass, G.V., Peckham, P.D., and Sanders, J.R., "Consequences of Failure to meet Assumptions Underlying the Fixed Effects Analyses of Variance and Covariance," *Review of Educational Research*, 1972,42,3:237-288.

Glass, G.V., and Stanley, J.C., *Statistical Methods in Education and Psychology*, Prentice Hall, Inc., Englewood Cliffs, N.J., 1970.

Goldhammer, K., "Citizen Participation and Criticism of Education," *The American School Board Journal*, 1956,132:27.

Guba, E.G., and Bidwell, C.E., "Administrative Relationships: Teacher Effectiveness, Teacher Satisfaction, and Administrative Behavior: A Study of the School as a Social Institution," *Studies in Educational Administration, No. 6*, Chicago, *University of Chicago Press, Midwest Administration Center*, 1957.

Hall, D.W., "The Effects of School Involvement on the Educational Attitudes of Community Adults," Unpublished Ed.D. Dissertation Northern Illinois University, 1971.

Hall, R.H., *Organizations: Structure and Process*, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1972.

Halliday, M.F., "An Investigation of Parent Attitudes and Teacher Morale in Relation to Community Unrest," Unpublished Ph.D. Dissertation, Michigan State University, 1970.

Halpin, A.W., "Change and Organizational Climate," The Journal of Educational Administration, 1967,5:5-25.

Halpin, A.W., and Croft, D.B., The Organizational Climate of Schools, The U.S. Office of Health, Education and Welfare, Contract No. SAE 543(8639), July, 1962.

Hammond, K.R., Householder, J.E., and Castellan, N.J. Jr., Introduction to the Statistical Method: Foundations and Use in the Behavioral Sciences, 2nd. Edition, Alfred A. Knopf, Inc., New York, 1970.

Haney, W.V., Communication and Organizational Behavior: Texts and Cases, Richard D. Irwin, Inc., Homewood, Ill., 3rd. Edition, 1973.

Kaufman, B.L., "Students' Perception of the Secondary School Climate," Unpublished Ph.D. Dissertation, University of Pittsburgh, 1969.

Keis, N., "Relationships between Organizational Climate of Schools and the Degree of Staff Turnover," Unpublished M.Ed., Thesis, Department of Educational Administration, The University of Alberta, 1967.

Keppel, G., Design and Analysis: A Researcher's Handbook, Prentice-Hall, Inc., Englewood Cliffs, N.J., 1973.

Klugh, H.E., Statistics: The Essentials for Research, John Wiley and Sons, Inc., New York, 1970.

Knill, W.D., Who Censure The Public Schools? Oregon School Study Council, March, 1961.

Koura, H.S., "An Experimental Study of Students' Achievement in Relation to the Morale of Selected Secondary Teachers," Unpublished Ph.D. Dissertation, The University of Michigan, 1963.

Lewin, K., A Dynamic Theory of Personality, New York, McGraw-Hill, 1935.

Lieman, H.I., "A Study of Teacher Attitudes and Morale as Related to Participation in Administration," Unpublished Ph.D. Dissertation, New York University, 1961.

Likert, R., New Patterns of Management, McGraw-Hill Book Company, New York, 1961.

Lolis, K., "Teacher Morale and Teacher Attitudes Towards Parents: A Psychological and Social Analysis of Inter-Relationships of Teacher Morale, the Attitudes of Teachers Expressed Towards Parents and Certain Personal Factors in Teachers' Lives in "Small City"," Unpublished Ph.D. Dissertation, New York University, 1962.

McGregor, D., "Adventures in Thought and Action," Proceedings of the Fifth Anniversary Convocation of the School of Industrial Management, Massachusetts Institute of Technology, Cambridge, Mass., April 9, 1957, Published by M.I.T., June 1957.

Marsh, W.L., "Teacher and Student Perception of School Climate," Unpublished M.Ed. Thesis, Department of Educational Administration, The University of Alberta, 1970.

Nicholas, L.V., Virjo, H.E., and Wattenberg, W.W., "Effects of Socio-economic Setting and Organizational Climate on Problems Brought to Elementary School Offices," Final Report of Cooperative Research Project, No. 2394, Wayne State University, Detroit, Michigan, 1965. Quoted in Halpin, A.W., "Change and Organizational Climate," The Journal of Educational Administration, 1967,5:5-25.

Phillips, R.B. Jr., "Teacher Attitude as Related to Student Attitude and Achievement in Elementary School Mathematics," School Science and Mathematics, 1973,73:501-507.

Popham, W.J., Educational Statistics: Use and Interpretation, Harper and Row, New York, 1967.

Prigmore, C.T., "A Study of Teachers' Fulfillment of Student Expectations as Related to School Organization Bureaucracy," Unpublished Ed.D. Dissertation, The University of Oklahoma, 1968.

Pyra, J.F., "A Study of Relationships between School Climate Characteristics and Student Attitude towards School," Unpublished M.Ed. Thesis, Department of Educational Administration, The University of Alberta, 1965.

Redefer, F.L., "Factors that affect Teacher Morale," The Nation's Schools, 1959,63:59.

Richardson, W.R., "A Study of Mature Student Opinion of the Characteristics of the Best Liked, The Best, The Least Liked, and The Ideal High School Teacher," Unpublished Ed.D. Dissertation, University of North Carolina, 1968.

Sergiovanni, T., "Factors which Affect Satisfaction and Dissatisfaction of Teachers," The Journal of Educational Administration, 1967, 5:66-82.

Swanson, Bert E., Cortin, Edith, and Main, E., "Parents in Search of Community Influence in the Public Schools," Education and Urban Society, 1969,1:383-403.

Sweat, J.P., "Authoritarian-Democratic Personality Traits of High School Principals and Teacher Morale," Unpublished Ed.D. Dissertation, The University of Arkansas, 1963.

Tatsuoka, M.M., "Multivariate Analysis in Educational Research," from Kerlinger, F.N., (ed.) Review of Research in Education, Vol. 1 Itasca, Ill., F.E. Peacock, 1973.

Tirpak, R.D., "Relationship Between Organizational Climate of Elementary Schools and Personal Characteristics of the Schools' Principals," Unpublished Ph.D. Dissertation, The University of Akron, 1970.

Wert, J.E., Neidt, C.O., and Ahmann, J.S., Statistical Methods in Educational and Psychological Research, New York, Appleton, Century-Crofts, 1954.

Williams, T.R., "Urban Schools and External Communication," Administrator's Notebook, 1969,17,5.

Wilson, W.G., "An Analysis of Change in the Organizational Climate of Schools," Unpublished M.Ed. Thesis, Department of Educational Administration, The University of Alberta, 1966.

Winer, B.J., Statistical Principals in Experimental Design, McGraw-Hill Book Co., New York, 1962.

Worsham, R.L., "Delinquent and Non-Delinquent Boys' Perceptions of School Experiences," Unpublished Ed.D. Dissertation, University of Southern California, 1971.

APPENDIX A

ITEMS AND FACTOR LOADINGS ON STUDENT SATISFACTION SCALE

APPENDIX A

Items and Factor Loadings on Student Satisfaction Scale

Item	Primary Loading	Secondary Loading
1. Students at this school are a great bunch.	.642 (V)	.261 (IV)
2. Teachers work with students to solve learning problems.	-.660 (III)	.172 (V)
3. The Principal supervises students very closely.	.585 (III)	-.482 (I)
4. Too much time is wasted on unimportant things.	.658 (III)	.150 (IV)
5. A student is just a number, not a person at this school.	.488 (IV)	.433 (III)
6. Teachers are prepared to discuss students' ideas.	-.458 (III)	.371 (V)
7. Anything students do well is recognized at this school.	-.494 (II)	.368 (V)
8. If a teacher dislikes a student there is no way the student can do well.	.613 (III)	.160 (V)
9. Teachers don't bother to learn students' names all year.	.695 (IV)	.388 (II)
10. Students get disciplined for incomplete assignments.	.519 (IV)	.388 (III)
11. Students and teachers have no chance to work together on group projects.	.691 (IV)	-.103 (I)
12. School authorities try to tell students how to live their lives.	.644 (IV)	.204 (II)
13. Teachers try to put students down by using sarcasm.	-.788 (I)	.270 (V)

APPENDIX A (continued)

Item	Primary Loading	Secondary Loading
14. Students get praised when they do a good job.	.641 (I)	.436 (V)
15. Teachers get out of school just as soon as they can.	.629 (II)	.328 (III)
16. The courses here are right on what students need to get a job.	-.444 (II)	-.303 (III)
17. This school really seems to be part of the community.	-.695 (II)	.244 (I)
18. The Principal and teachers are against the students.	.645 (II)	.293 (V)
19. Teachers don't prepare for their classes.	.520 (IV)	.473 (II)
20. The Principal tells students what courses they will take.	.546 (IV)	.185 (II)
21. This school is unrelated to the real world outside.	.566 (III)	.119 (IV)
22. Teachers are always willing to work on community projects.	-.498 (II)	.367 (V)
23. There are too many compulsory courses.	.499 (IV)	.292 (III)
24. There is a friendly atmosphere in this school.	.661 (I)	-.331 (III)
25. Students could drop out of this school and no one would care.	.512 (III)	.355 (II)
26. The Principal continually tries to catch students.	-.666 (I)	.334 (IV)
27. Students don't learn how to study only what to study.	.417 (IV)	.402 (III)
28. Students can establish good relations with teachers here.	.464 (I)	.449 (V)

APPENDIX A (continued)

Item	Primary Loading	Secondary Loading
29. There is no freedom here to do anything.	.701 (II)	.256 (IV)
30. The Principal is concerned that students get a fair deal.	.924 (I)	-.248 (III)
31. Students are encouraged to take part in student government.	.590 (I)	-.298 (II)
32. Teachers at this school treat students as real people.	.924 (I)	-.248 (III)
33. Teachers use their own time to help students with problems.	.449 (I)	.328 (V)
34. Students get recognition when they do a good job.	.645 (V)	.448 (I)
35. Teachers help students realize they have something to give to people.	-.490 (III)	.405 (I)
36. Students can talk freely with teachers.	.442 (I)	.206 (V)
37. Teachers take the trouble to explain the importance of a subject.	-.771 (II)	.131 (III)
38. Teachers cooperate with each other.	.928 (I)	-.129 (IV)

APPENDIX B

RELEVANT CORRESPONDENCE

St. Paul Regional High School District No. 1
P.O. BOX 1461
St. Paul, Alberta

April 4, 1972

Mr. Alan Hellyer
855 General Services Building
University of Alberta
Edmonton 7, Alberta

Dear Sir:

RE: Research Project

This is to advise that we will be very happy to participate and cooperate with you on the proposed research project you discussed with me.

Yours truly,

Paul Chamberland
Principal

PC/jw

County Of St. Paul No. 19
OFFICE OF SEC.-TREAS.
St. Paul, Alberta
Postal Code T0A 3A0

April 11th, 1972.

Mr. A. Hellyer,
855- General Services Building,
University of Alberta,
Edmonton, Alberta.

Dear Sir:

The following are the specific enrolments of the Senior High Schools of the County of St.Paul # 19:

Ashmont Secondary - 64

F.G. Miller High School, Elk Point - 132

Mallaig - 78

Heinsburg - 36.

Attached is a list of teachers offering high School instruction during the second semester.

Trust that this is the information you are seeking.

Yours truly,

Stan Grywalski,
Superintendent of Schools.

SG.wl.
Encl.

855 General Services Building,
June 7th, 1972.

Explanatory Note:

This letter was sent to teachers who had not returned questionnaire items for this study.

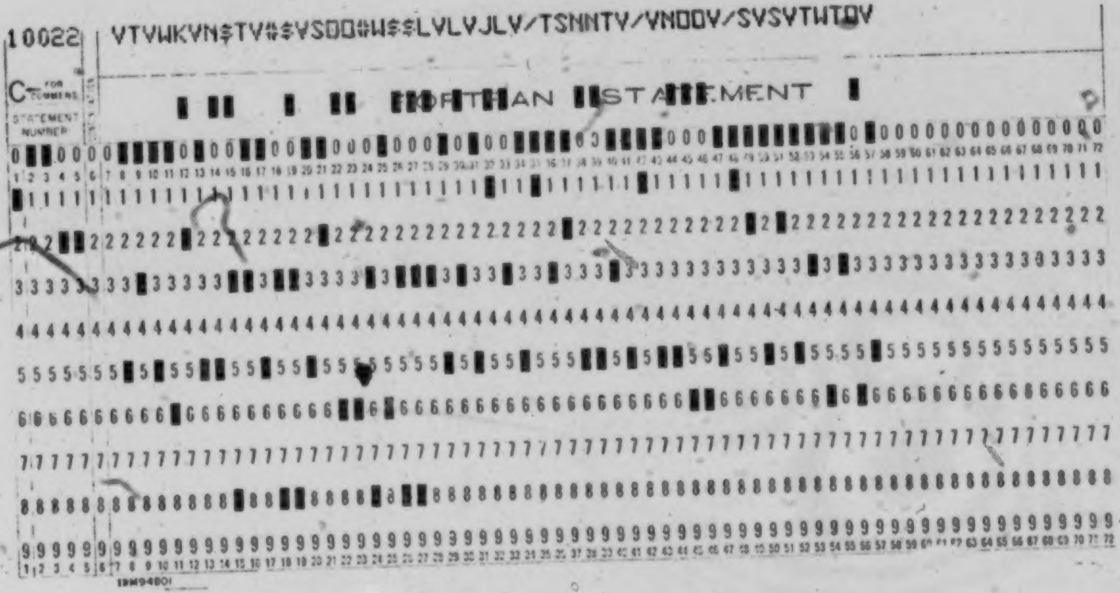
I have been disappointed to see that you have not returned the questionnaire distributed to you as part of the St. Paul Study. If you have a memory like mine, you have probably just forgotten to return it. If this is the case, please drop it in the mail to me as soon as possible, and don't bother to read any further. On the other hand, if you have some reservations about answering the questionnaire, please read on.

Because I am uncertain why you have not returned the questionnaire, I am at a loss to know how to gain your confidence and your cooperation. Perhaps if I talk about the study itself, and the safeguards that exist to protect your anonymity, it might be a start.

I believe that far too little is known of the important role played by teachers in the community. The St. Paul Study is designed to measure the influence teachers exert, consciously or unconsciously, on the students they teach, on the students' parents, and in the community as a whole. Your contribution to the study is of great importance for, as a teacher, you and your colleagues exert an influence on the students you teach and, as a "school", exert an additional influence on the whole community. I am interested in measuring this influence.

It is difficult to explain how individual information, given in a study of this nature, can be important in itself yet remain anonymous within the total information presented by the group. It may help to think of individual information as being like part of a complex machine. It is of great importance itself but it achieves even greater importance as a part of the total working mechanism. Just the same, safeguards have been used in this study to keep individual information strictly confidential.

Each set of responses made by each participant is coded into the form shown on the computer card reproduced below. It is coded directly from the answer sheets, and makes no sense to anyone. But the information, so coded, can be scored by the computer to produce the data needed for this study. For the purposes of this study there is no need for the information received from the participants to be decoded further. This is one of the main reasons why I feel confident in the assurances I have given you regarding the security of the information you have given me.



10022 VTVWKVN$TV#$VSDD#W$$LVLVJLV/TSNNTV/VNDDV/SVSVTWTDV

I do not know whether the information I have given you about the study and the security measures built into it have restored your confidence, but I would certainly appreciate your participation in this study. If you have any further questions about the study, as a whole or specific parts of it, I would be happy to give you further information. In the meantime I would appreciate it if you would complete the questionnaire and return it to me. If you have mislaid the original one, please write to me and I will supply you with another.

Yours sincerely,

Alan Hellyer.

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON 7, CANADA

855 General Services Building,
June 6th, 1972

Dear Sir or Madam:

I am aware that you have a lot of extra duties to complete by the end of the year, but I would be grateful if you could give me the same generous assistance you gave me recently and take a few minutes to complete the attached form.

The purpose of the attached rating scale is to obtain your assessment of the degree of satisfaction with school that each student whom you taught displayed during the year. These ratings will be used to test the validity of one of the instruments used in The St. Paul Study.

For the sake of uniformity, the following definition of "satisfaction" is proposed:

> . . . the extent to which students see school as meeting their expectations for personal, academic and social development and of providing opportunities and experiences relevant to his goal aspirations.

INSTRUCTIONS:

Please rate each student whom you taught on a three-point scale of satisfaction, High, Medium or Low, by placing an H, M or L alongside the student's name. If you would return the completed ratings to the school office as soon as possible they will be returned to me by mail.

I would ask your cooperation in this final matter, for it will provide valuable information on the validity of one of the measures used in the earlier study, and could provide information which would lead to better student-teacher understanding.

May I take this opportunity of thanking you for your past cooperation and of wishing you a pleasant Summer vacation.

Yours sincerely,

Alan Hellyer

Alan Hellyer

APPENDIX C

INSTRUMENTS COMPLETED BY PARENTS

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON 7, CANADA

Dear Parent:

Could I enlist your aid in a study that is being conducted in the High Schools of St. Paul County. Its purpose is to examine how certain aspects of school life appear to Administrators, Teachers, Students, Parents and School Employees. I would welcome your cooperation and participation in this study.

Although this study has the approval of the School Authorities, it is not being conducted by them, and your identity and your responses will remain confidential. It may seem odd, therefore, that you are asked to attach your name to the Answer Sheet. Allow me to explain. The statistical analyses to which these data will be subjected require the matching of student's responses with those of his or her parents, and with those of his or her teachers. It is important, therefore, that I have your name to effect this matching. Once it has been achieved, your responses will be identified by a code number. Once the data have been coded there will be no way in which individual responses can be identified.

Your participation in this study is very important. When you have completed your responses, please seal them in the envelope supplied and have your son or daughter return them to school. I will collect them there in the unopened envelopes and take them from the school for coding and analysis.

The results of this study will be presented so that your responses will appear as part of the group findings. Every effort will be made to ensure that your responses to the test items will remain confidential. I hope that you will cooperate with me by completing your section of the study. Do not be afraid to answer any of the questions frankly.

Thank you for your patience in reading this letter, and for your cooperation.

Yours sincerely,

Alan Hellyer

Alan Hellyer

THE ST. PAUL STUDY

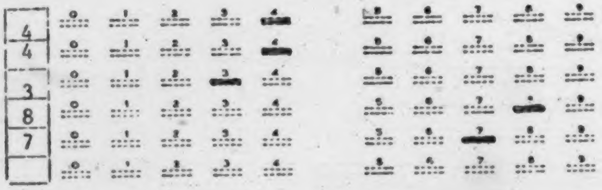
This study is designed to allow Administrators, Teachers, Parents, Students and School Employees to express their views about the local High School, as it relates to the community. Your views are important to this study, so please express them frankly. There are no right or wrong responses. The one that expresses your view is the right one for you.

A separate Answer Sheet is provided for your responses. There is a place on it for your name. As well, you have been given an I.D. number for this study to preserve your identity. Please record your name and I.D. number on the Answer Sheet in the manner shown below.

The responses you make will be confidential. DO NOT OMIT ANY ITEMS.

HOW TO RECORD YOUR I.D. NUMBER

If your I.D. Number happened to be 44387 , you would record it as shown in the example to the right.



DIRECTIONS FOR RECORDING RESPONSES ON ANSWER SHEET

Read each statement carefully. Then indicate whether you agree, probably agree, probably disagree, or disagree with each statement. Mark your answers on the separate answer sheet in the following manner:

If you agree with the statement, blacken the space.................(1)..... [✓ A 1] B 2 C 3 D 4

If you are somewhat uncertain, but probably agree with the statement, blacken the space.................(2) A 1 [✓ B 2] C 3 D 4

If you are somewhat uncertain, but probably disagree with the statement, blacken the space.................(3) A 1 B 2 [✓ C 3] D 4

If you disagree with the statement, blacken the space.............(4)..... A 1 B 2 C 3 [✓ D 4]

All marks should be heavy and completely fill the answer space. If you change a response, erase the first mark completely. Make no stray marks on the answer sheet. Please do not mark this booklet.

ST. PAUL OPINIONAIRE

Instructions:

The following statements relate to conditions which have been said to exist in some High Schools. Please indicate the extent to which you agree that each of the following statements is true of your High School.

Record your answers on the separate Answer Sheet provided. Do this by placing a mark in one of the guide lines as shown in the example. Use an HB pencil. Do not make marks longer than the guide lines. The numbers in brackets at the top of each column, indicate the correct set of guide lines for that answer.

****

Agree (1)	Probably agree (2)	Probably disagree (3)	Disagree (4)

		(1)	(2)	(3)	(4)
1.	Students at this school are a great bunch.	A	PA	PD	D
2.	Teachers work with students to solve learning problems.	A	PA	PD	D
3.	The Principal supervises students very strictly.	A	PA	PD	D
4.	Too much time is wasted on unimportant things.	A	PA	PD	D
5.	A student is just a number, not a person, at this school.	A	PA	PD	D
6.	Teachers are prepared to discuss students' ideas.	A	PA	PD	D
7.	Anything students do well is recognized at this school.	A	PA	PD	D
8.	If a teacher doesn't like a student there is no way the student can do well.	A	PA	PD	D
9.	Teachers don't bother to learn students' names all year.	A	PA	PD	D
10.	Students get disciplined for incomplete assignments.	A	PA	PD	D
11.	Students and teachers have no chance to work together on group projects.	A	PA	PD	D
12.	School authorities try to tell students how to live their lives.	A	PA	PD	D
13.	Teachers try to put students down by using sarcasm.	A	PA	PD	D
14.	Students get praised when they do a good job.	A	PA	PD	D
15.	Teachers get out of school just as soon as they can.	A	PA	PD	D
16.	The courses here are right on what students need to get a job.	A	PA	PD	D
17.	This school really seems to be part of the community.	A	PA	PD	D
18.	The Principal and teachers are against the students.	A	PA	PD	D
19.	Teachers don't prepare for their classes.	A	PA	PD	D
20.	The Principal tells students what courses they will take.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET -- USE THE ANSWER SHEET SUPPLIED

	(1)	(2)	(3)	(4)
21. This school is unrelated to the real world outside.	A	PA	PD	D
22. Teachers are always willing to work on community projects.	A	PA	PD	D
23. There are too many compulsory courses.	A	PA	PD	D
24. There is a friendly atmosphere in this school.	A	PA	PD	D
25. Students could drop out of this school and no one would care.	A	PA	PD	D
26. The Principal continually tries to catch students.	A	PA	PD	D
27. Students don't learn how to study only what to study.	A	PA	PD	D
28. Students can establish good relations with teachers at this school.	A	PA	PD	D
29. There is no freedom here to do anything.	A	PA	PD	D
30. The Principal is concerned that students get a fair deal.	A	PA	PD	D
31. Students are encouraged to take part in student government.	A	PA	PD	D
32. Teachers at this school treat students as real people.	A	PA	PD	D
33. Teachers use their own time to help students with problems.	A	PA	PD	D
34. Students get recognition when they do a good job.	A	PA	PD	D
35. Teachers help students realize they have something to give to people.	A	PA	PD	D
36. Students can talk freely with teachers here.	A	PA	PD	D
37. Teachers take the trouble to explain the importance of a subject.	A	PA	PD	D
38. Teachers cooperate with each other.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET -- USE THE ANSWER SHEET SUPPLIED

Please continue to the next page and complete the questions there.

ST. PAUL PARENTS' QUESTIONNAIRE

Instructions:

To answer these questions, please use the Answer Sheet provided. You may not be familiar with this method of answering but your children are quite used to it. If you need help, please ask your son or daughter to show you. Choose the answer you desire. Near it you will find a number in brackets. Place a mark in the guide lines which bear that number on the Answer Sheet. The example on the page before will show you how to do it.

****

1. How many years have you lived in this area?

1 - 2	3 - 5	6 - 9	10 - 15	16 or more
(1)	(2)	(3)	(4)	(5)

2. Do you plan to . . . stay in this area permanently? (1)
move in a year or so? (2)
move as soon as possible? (3)
My future plans are uncertain at present. (4)

3. Do you now . . . live with parents? (1)
live on a reservation? (2)
own your own home? (3)
rent but do not plan to buy? (4)
rent now but plan to buy soon? (5)

4. Please indicate your present age group.

21 - 29	30 - 39	40 - 49	50 - 59	60 or over
(1)	(2)	(3)	(4)	(5)

5. Sex: Male (1) Female (2)

6. What is your relationship to the student?

Mother?	Father?	Relative?	Landlord?	Other?	______________
(1)	(2)	(3)	(4)	(5)	(Specify)

7. In this household, are you . . .
. . . the major income earner? (1)
. . . wife of the major income earner? (2)
. . . husband of the major income earner? (3)
. . . a resident in the household? (4)

8. How many years of regular schooling did you complete?

Less than 6	7 - 9	10 - 12	13 - 15	16 or more
(1)	(2)	(3)	(4)	(5)

9. In this household, is the major income earner . . .

a. employed in private business? (1)
b. employed on a government job? (2)
c. self employed? (3)
d. at present unemployed? (4)

10. What is the normal work of the major income earner?

a. managerial? (1)
b. skilled worker? (2)
c. semi-skilled worker? (3)
d. unskilled worker? (4)

11. How interested are you in local High School affairs?

Very interested	Interested	Undecided	Not interested	Not at all interested
(1)	(2)	(3)	(4)	(5)

12. How satisfied are you with the amount of information you get about the local High School?

Very satisfied	Satisfied	Undecided	Not satisfied	Not at all satisfied
(1)	(2)	(3)	(4)	(5)

13. How do you get most of your information about the local High School?

a. from news media? (1)
b. from the Principal or teachers? (2)
c. from other school employees? (3)
d. from your children? (4)
e. from the neighbours? (5)

14. How desirable do you think it is that teachers should live and teach in the same community?

Very desirable	Desirable	Undecided	Not desirable	Not at all desirable
(1)	(2)	(3)	(4)	(5)

15. How many times during the past year have you visited the local High School to discuss your child's education?

None	1 - 2	3 - 4	5 - 6	7 or more
(1)	(2)	(3)	(4)	(5)

16. How satisfied have you been with the way your problems, in relation to the school, have been handled?

Very satisfied	Satisfied	Undecided	Not satisfied	Not at all satisfied
(1)	(2)	(3)	(4)	(5)

17. How many of the teachers at the local High School do you know well enough to visit socially?

None	1 - 2	4	5 - 6	7 or more
(1)	(2)	(3)	(4)	(5)

18. In this community, how active are you in . . .

	. . . Social activities?	Very active (1)	Some activity (2)	No activity (3)
19.	. . . Sporting activities?	Very active (1)	Some activity (2)	No activity (3)
20.	. . . Service activities?	Very active (1)	Some activity (2)	No activity (3)
21.	. . . Church activities?	Very active (1)	Some activity (2)	No activity (3)

22. Can you suggest any ways by which the local High School could improve its service to the community? Do not use the Answer Sheet for this question. Write your answer below.

Thank you for being so patient, and thank you for your cooperation.

****

NAME ______________________________ Last First Middle

FACULTY or SCHOOL ______________________________

AGE ____ Years YEAR or GRADE ____ ☐ Male ☐ Female DATE ____ Day Month Year

I.D. NUMBER

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

1. THE ST.PAUL STUDY

PART 1.

2. The St. Paul Opinionaire

Indicate response by placing a mark between the guidelines as shown in the example. Use HB pencil. Don't make marks longer than guidelines.

Example

1	1	2	3	4	10	1	2	3	4	19	1	2	3	4	29	1	2	3	4
2	1	2	3	4	11	1	2	3	4	20	1	2	3	4	30	1	2	3	4
3	1	2	3	4	12	1	2	3	4	21	1	2	3	4	31	1	2	3	4
4	1	2	3	4	13	1	2	3	4	22	1	2	3	4	32	1	2	3	4
5	1	2	3	4	14	1	2	3	4	23	1	2	3	4	33	1	2	3	4
6	1	2	3	4	15	1	2	3	4	24	1	2	3	4	34	1	2	3	4
7	1	2	3	4	16	1	2	3	4	25	1	2	3	4	35	1	2	3	4
8	1	2	3	4	17	1	2	3	4	26	1	2	3	4	36	1	2	3	4
9	1	2	3	4	18	1	2	3	4	27	1	2	3	4	37	1	2	3	4
										28	1	2	3	4	38	1	2	3	4

Answer Parents' and Students' Questionnaire and Teachers' Opinionaire below this line.

1	1	2	3	4	5	26	1	2	3	4	5	51	1	2	3	4	5	76	1	2	3	4	5
2	1	2	3	4	5	27	1	2	3	4	5	52	1	2	3	4	5	77	1	2	3	4	5
3	1	2	3	4	5	28	1	2	3	4	5	53	1	2	3	4	5	78	1	2	3	4	5
4	1	2	3	4	5	29	1	2	3	4	5	54	1	2	3	4	5	79	1	2	3	4	5
5	1	2	3	4	5	30	1	2	3	4	5	55	1	2	3	4	5	80	1	2	3	4	5
6	1	2	3	4	5	31	1	2	3	4	5	56	1	2	3	4	5	81	1	2	3	4	5
7	1	2	3	4	5	32	1	2	3	4	5	57	1	2	3	4	5	82	1	2	3	4	5
8	1	2	3	4	5	33	1	2	3	4	5	58	1	2	3	4	5	83	1	2	3	4	5
9	1	2	3	4	5	34	1	2	3	4	5	59	1	2	3	4	5	84	1	2	3	4	5
10	1	2	3	4	5	35	1	2	3	4	5	60	1	2	3	4	5	85	1	2	3	4	5
11	1	2	3	4	5	36	1	2	3	4	5	61	1	2	3	4	5	86	1	2	3	4	5
12	1	2	3	4	5	37	1	2	3	4	5	62	1	2	3	4	5	87	1	2	3	4	5
13	1	2	3	4	5	38	1	2	3	4	5	63	1	2	3	4	5	88	1	2	3	4	5
14	1	2	3	4	5	39	1	2	3	4	5	64	1	2	3	4	5	89	1	2	3	4	5
15	1	2	3	4	5	40	1	2	3	4	5	65	1	2	3	4	5	90	1	2	3	4	5
16	1	2	3	4	5	41	1	2	3	4	5	66	1	2	3	4	5	91	1	2	3	4	5
17	1	2	3	4	5	42	1	2	3	4	5	67	1	2	3	4	5	92	1	2	3	4	5
18	1	2	3	4	5	43	1	2	3	4	5	68	1	2	3	4	5	93	1	2	3	4	5
19	1	2	3	4	5	44	1	2	3	4	5	69	1	2	3	4	5	94	1	2	3	4	5
20	1	2	3	4	5	45	1	2	3	4	5	70	1	2	3	4	5	95	1	2	3	4	5
21	1	2	3	4	5	46	1	2	3	4	5	71	1	2	3	4	5	96	1	2	3	4	5
22	1	2	3	4	5	47	1	2	3	4	5	72	1	2	3	4	5	97	1	2	3	4	5
23	1	2	3	4	5	48	1	2	3	4	5	73	1	2	3	4	5	98	1	2	3	4	5
24	1	2	3	4	5	49	1	2	3	4	5	74	1	2	3	4	5	99	1	2	3	4	5
25	1	2	3	4	5	50	1	2	3	4	5	75	1	2	3	4	5	100	1	2	3	4	5

PART 2. THIS SECTION FOR USE BY STUDENTS ONLY

											4 (	0	1	2	3	4	5	6	7	8	9
												0	1	2	3	4	5	6	7	8	9
1 (	0	1	2	3	4	5	6	7	8	9	5 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9
2 (	0	1	2	3	4	5	6	7	8	9	6 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9
3 (	0	1	2	3	4	5	6	7	8	9	7 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9

IBM5047

OVERPRINT ANSWER SHEET

CAUTION — AVOID PLACING ANY MARKS AMONG THE BLACK TIMING LINES

APPENDIX D

INSTRUMENTS COMPLETED BY STUDENTS

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON 7, CANADA

Dear Student:

Could I enlist your aid in a study that is being conducted in the High Schools of St. Paul County. Its purpose is to examine how certain aspects of school life appear to Administrators, Teachers, other School Employees, Parents and Students. I would welcome your cooperation and participation in this study.

Although this study has the approval of the School Authorities, it is not being conducted by them and your identity and responses will remain confidential. It may seem odd, therefore, that you are asked to attach your name to the Answer Sheet. Allow me to explain. The statistical analyses to which these data will be subjected require that students' responses are matched with those of their parents, and with those of their teachers. It is important, therefore, that I have your name to effect this matching. Once it has been achieved, your responses will be given a code number. Once the data have been coded for analysis there will be no way in which individual responses can be identified.

Your parents' participation in this study is also important. Would you please take home to your parents, or the people with whom you are living, the Parents' Questionnaire you have been given. It is very like the one you are about to complete. If necessary, would you please help your parents to complete the Questionnaire and return it to school on the next school day. Return it sealed in the envelope provided to the School Office. I will collect them and take them from the school for coding and analysis.

The results of this study will be presented so that your responses will appear as part of the group findings. Your responses will be strictly confidential. I hope that you will cooperate with me by completing your section of the study, and also by encouraging your parents, or those with whom you live, to complete their section of the study as well. Do not be afraid to answer any of the questions frankly.

Thank you for your patience in reading this letter, and for your cooperation.

Yours sincerely,

Alan Hellyer

Alan Hellyer.

THE ST. PAUL STUDY

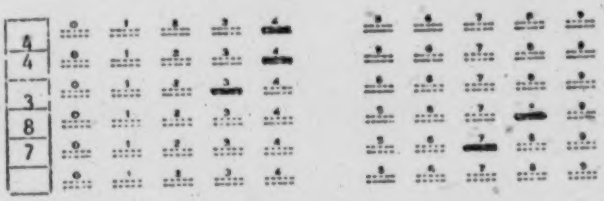
This study is designed to allow Administrators, Teachers, Parents, Students and School Employees to express their views about the local High School, as it relates to the community. Your views are important to this study, so please express them frankly. There are no right or wrong responses. The one that expresses your view is the right one for you.

A separate Answer Sheet is provided for your responses. There is a place on it for your name. As well, you have been given an I.D. number for this study to preserve your identity. Please record your name and I.D. number on the Answer Sheet in the manner shown below.

The responses you make will be confidential. DO NOT OMIT ANY ITEMS.

HOW TO RECORD YOUR I.D. NUMBER

If your I.D. Number happened to be 44387, you would record it as shown in the example to the right.



DIRECTIONS FOR RECORDING RESPONSES ON ANSWER SHEET

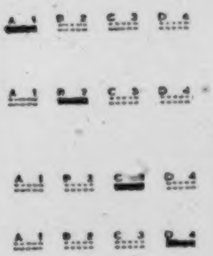
Read each statement carefully. Then indicate whether you agree, probably agree, probably disagree, or disagree with each statement. Mark your answers on the separate answer sheet in the following manner:

If you agree with the statement, blacken the space..................(1).....

If you are somewhat uncertain, but probably agree with the statement, blacken the space..(2)

If you are somewhat uncertain, but probably disagree with the statement, blacken the space..(3)....

If you disagree with the statement, blacken the space..............(4).....



All marks should be heavy and completely fill the answer space. If you change a response, erase the first mark completely. Make no stray marks on the answer sheet. Please do not mark this booklet.

ST. PAUL OPINIONAIRE

Instructions:

The following statements relate to conditions which have been said to exist in some High Schools. Please indicate the extent to which you agree that each of the following statements is true of your High School.

Record your answers on the separate Answer Sheet provided. Do this by placing a mark in one of the guide lines as shown in the example. Use an HB pencil. Do not make marks longer than the guide lines. The numbers in brackets at the top of each column, indicate the correct set of guide lines for that answer.

****

Agree (1)	Probably agree (2)	Probably disagree (3)	Disagree (4)

		(1)	(2)	(3)	(4)
1.	Students at this school are a great bunch.	A	PA	PD	D
2.	Teachers work with students to solve learning problems.	A	PA	PD	D
3.	The Principal supervises students very strictly.	A	PA	PD	D
4.	Too much time is wasted on unimportant things.	A	PA	PD	D
5.	A student is just a number, not a person, at this school.	A	PA	PD	D
6.	Teachers are prepared to discuss students' ideas.	A	PA	PD	D
7.	Anything students do well is recognized at this school.	A	PA	PD	D
8.	If a teacher doesn't like a student there is no way the student can do well.	A	PA	PD	D
9.	Teachers don't bother to learn students' names all year.	A	PA	PD	D
10.	Students get disciplined for incomplete assignments.	A	PA	PD	D
11.	Students and teachers have no chance to work together on group projects.	A	PA	PD	D
12.	School authorities try to tell students how to live their lives.	A	PA	PD	D
13.	Teachers try to put students down by using sarcasm.	A	PA	PD	D
14.	Students get praised when they do a good job.	A	PA	PD	D
15.	Teachers get out of school just as soon as they can.	A	PA	PD	D
16.	The courses here are right on what students need to get a job.	A	PA	PD	D
17.	This school really seems to be part of the community.	A	PA	PD	D
18.	The Principal and teachers are against the students.	A	PA	PD	D
19.	Teachers don't prepare for their classes.	A	PA	PD	D
20.	The Principal tells students what courses they will take.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET — USE THE ANSWER SHEET SUPPLIED

	(1)	(2)	(3)	(4)
21. This school is unrelated to the real world outside.	A	PA	PD	D
22. Teachers are always willing to work on community projects.	A	PA	PD	D
23. There are too many compulsory courses.	A	PA	PD	D
24. There is a friendly atmosphere in this school.	A	PA	PD	D
25. Students could drop out of this school and no one would care.	A	PA	PD	D
26. The Principal continually tries to catch students.	A	PA	PD	D
27. Students don't learn how to study only what to study.	A	PA	PD	D
28. Students can establish good relations with teachers at this school.	A	PA	PD	D
29. There is no freedom here to do anything.	A	PA	PD	D
30. The Principal is concerned that students get a fair deal.	A	PA	PD	D
31. Students are encouraged to take part in student government.	A	PA	PD	D
32. Teachers at this school treat students as real people.	A	PA	PD	D
33. Teachers use their own time to help students with problems.	A	PA	PD	D
34. Students get recognition when they do a good job.	A	PA	PD	D
35. Teachers help students realize they have something to give to people.	A	PA	PD	D
36. Students can talk freely with teachers here.	A	PA	PD	D
37. Teachers take the trouble to explain the importance of a subject.	A	PA	PD	D
38. Teachers cooperate with each other.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET -- USE THE ANSWER SHEET SUPPLIED

Please continue to the next page and complete the questions there.

ST. PAUL STUDENTS' QUESTIONNAIRE

Instructions:

To answer these questions, please use the Answer Sheet provided. You are probably familiar with this method of answering, but if you need help please ask your teacher. Choose the answer you desire. Near it you will find a number in brackets. Place a mark in the guide lines which bear that number on the Answer Sheet. The example on the page before will show you how to do it.

****

1. How many years have you lived in this area?

1 - 2	3 - 5	6 - 9	10 - 15	16 or more
(1)	(2)	(3)	(4)	(5)

2. Do you plan to . . . stay in this area permanently? (1)
move in a year or so? (2)
move as soon as possible? (3)
My future plans are uncertain at present. (4)

3. Do you now . . . live with parents in town? (1)
live with parents in the country? (2)
live with parents on a reservation? (3)
live with relatives in town? (4)
board in town? (5)

4. Please indicate your present age group.

Under 16	16 - 17	18 - 19	20 - 21	22 or over
(1)	(2)	(3)	(4)	(5)

5. What Grade are you in at High School?

Grade 10	Grade 11	Grade 12
(1)	(2)	(3)

6. Sex: Male (1) Female (2)

7. How interested are you in extra-curricular High School activities?

Very interested	Interested	Undecided	Not interested	Not at all interested
(1)	(2)	(3)	(4)	(5)

8. How satisfied are you with the amount of information your parents get about the local High School?

Very satisfied	Satisfied	Undecided	Not satisfied	Not at all satisfied
(1)	(2)	(3)	(4)	(5)

9. How do your parents get most of their information about the local High School?

a. from news media? (1)

b. from the Principal and teachers? (2)

c. from other school employees? (3)

d. from you, yourself? (4)

e. from the neighbours? (5)

10. How desirable do you think it is that teachers should live and teach in the same community?

Very desirable	Desirable	Undecided	Not desirable	Not at all desirable
(1)	(2)	(3)	(4)	(5)

11. How many of the teachers at the local High School do you, yourself, know well enough to visit socially?

None	1 - 2	3 - 4	5 - 6	7 or more
(1)	(2)	(3)	(4)	(5)

12. In this community, how active are you in . . .

		Very active	Some activity	No activity
12.	. . . Social activities?	(1)	(2)	(3)
13.	. . . Sporting activities?	(1)	(2)	(3)
14.	. . . Service activities?	(1)	(2)	(3)
15.	. . . Church activities?	(1)	(2)	(3)

16. List the names and the I.D. numbers of the teacher you have had in the past school year on the lines below. Transfer their I.D. numbers to Part 2 of the Answer Sheet. If you had more than seven teachers, list the seven with whom you had most contact.

(1)________________________________ ________

(2)________________________________ ________

(3)________________________________ ________

(4)________________________________ ________

(5)________________________________ ________

(6)________________________________ ________

(7)________________________________ ________

List teachers with I.D. numbers lower than 10, as 01, 02, 03, etc.

Note: The names of teachers at this school, and their I.D. numbers for this study, are listed on the page following.

Thank you for being so patient, and thank you for your cooperation.

NAME ____________________ Last ____________________ First ____________________ Middle

FACULTY or SCHOOL ____________________

AGE ______ Years YEAR or GRADE ______ ☐ Male ☐ Female DATE ______ Day ______ Month ______ Year

1. THE ST. PAUL STUDY

PART 1.

2. The St. Paul Opinionaire

Indicate response by placing a mark between the guidelines as shown in the example. Use HB pencil. Don't make marks longer than guidelines.

Example

::::: ::::: ▬ ::::: :::::

I. D. NUMBER

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

1	1	2	3	4	10	1	2	3	4	19	1	2	3	4	29	1	2	3	4
2	1	2	3	4	11	1	2	3	4	20	1	2	3	4	30	1	2	3	4
3	1	2	3	4	12	1	2	3	4	21	1	2	3	4	31	1	2	3	4
4	1	2	3	4	13	1	2	3	4	22	1	2	3	4	32	1	2	3	4
5	1	2	3	4	14	1	2	3	4	23	1	2	3	4	33	1	2	3	4
6	1	2	3	4	15	1	2	3	4	24	1	2	3	4	34	1	2	3	4
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8	1	2	3	4	17	1	2	3	4	26	1	2	3	4	36	1	2	3	4
9	1	2	3	4	18	1	2	3	4	27	1	2	3	4	37	1	2	3	4
										28	1	2	3	4	38	1	2	3	4

Answer Parents' and Students' Questionnaire and Teachers' Opinionaire below this line.

1	1	2	3	4	5	26	1	2	3	4	5	51	1	2	3	4	5	76	1	2	3	4	5
2	1	2	3	4	5	27	1	2	3	4	5	52	1	2	3	4	5	77	1	2	3	4	5
3	1	2	3	4	5	28	1	2	3	4	5	53	1	2	3	4	5	78	1	2	3	4	5
4	1	2	3	4	5	29	1	2	3	4	5	54	1	2	3	4	5	79	1	2	3	4	5
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6	1	2	3	4	5	31	1	2	3	4	5	56	1	2	3	4	5	81	1	2	3	4	5
7	1	2	3	4	5	32	1	2	3	4	5	57	1	2	3	4	5	82	1	2	3	4	5
8	1	2	3	4	5	33	1	2	3	4	5	58	1	2	3	4	5	83	1	2	3	4	5
9	1	2	3	4	5	34	1	2	3	4	5	59	1	2	3	4	5	84	1	2	3	4	5
10	1	2	3	4	5	35	1	2	3	4	5	60	1	2	3	4	5	85	1	2	3	4	5
11	1	2	3	4	5	36	1	2	3	4	5	61	1	2	3	4	5	86	1	2	3	4	5
12	1	2	3	4	5	37	1	2	3	4	5	62	1	2	3	4	5	87	1	2	3	4	5
13	1	2	3	4	5	38	1	2	3	4	5	63	1	2	3	4	5	88	1	2	3	4	5
14	1	2	3	4	5	39	1	2	3	4	5	64	1	2	3	4	5	89	1	2	3	4	5
15	1	2	3	4	5	40	1	2	3	4	5	65	1	2	3	4	5	90	1	2	3	4	5
16	1	2	3	4	5	41	1	2	3	4	5	66	1	2	3	4	5	91	1	2	3	4	5
17	1	2	3	4	5	42	1	2	3	4	5	67	1	2	3	4	5	92	1	2	3	4	5
18	1	2	3	4	5	43	1	2	3	4	5	68	1	2	3	4	5	93	1	2	3	4	5
19	1	2	3	4	5	44	1	2	3	4	5	69	1	2	3	4	5	94	1	2	3	4	5
20	1	2	3	4	5	45	1	2	3	4	5	70	1	2	3	4	5	95	1	2	3	4	5
21	1	2	3	4	5	46	1	2	3	4	5	71	1	2	3	4	5	96	1	2	3	4	5
22	1	2	3	4	5	47	1	2	3	4	5	72	1	2	3	4	5	97	1	2	3	4	5
23	1	2	3	4	5	48	1	2	3	4	5	73	1	2	3	4	5	98	1	2	3	4	5
24	1	2	3	4	5	49	1	2	3	4	5	74	1	2	3	4	5	99	1	2	3	4	5
25	1	2	3	4	5	50	1	2	3	4	5	75	1	2	3	4	5	100	1	2	3	4	5

PART 2. THIS SECTION FOR USE BY STUDENTS ONLY

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												0	1	2	3	4	5	6	7	8	9
1 (	0	1	2	3	4	5	6	7	8	9	5 (	0	1	2	3	4	5	6	7	8	9
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2 (	0	1	2	3	4	5	6	7	8	9	6 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9
3 (	0	1	2	3	4	5	6	7	8	9	7 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9		0	1	2	3	4	5	6	7	8	9

IBM 504T

OVERPRINT ANSWER SHEET

CAUTION – AVOID PLACING ANY MARKS AMONG THE BLACK TIMING LINES

APPENDIX E

INSTRUMENTS COMPLETED BY TEACHERS

FACULTY OF EDUCATION
DEPARTMENT OF EDUCATIONAL
ADMINISTRATION

THE UNIVERSITY OF ALBERTA
EDMONTON 7, CANADA

Dear Sir or Madam:

Could I enlist your aid in a study that is being conducted in the High Schools of St. Paul County. Its purpose is to examine how certain aspects of school life appear to Administrators, Teachers, Students, Parents and School Employees. I would welcome your cooperation and participation in this study.

Although this study has the approval of the School Authorities, it is not being conducted by them, and your identity and your responses will remain confidential. It may seem odd, therefore, that you are asked to attach your name to the Answer Sheet. Allow me to explain. The statistical analyses to which these data will be subjected require the matching of students' responses with those of their parents, and with those of their teachers. It is important, therefore, that I have your name to effect this matching. Once it has been achieved, your responses will be identified by a code number. Once the data have been coded there will be no way in which individual responses can be identified.

Your participation in this study is very important. When you have completed your responses, please seal them in the envelope supplied and leave them with the school office. I will collect them from there and take them from the school for coding and analysis.

The results of this study will be presented so that your responses will appear as part of the group findings. Every effort will be made to ensure that your responses to the test items will remain confidential. I hope that you will cooperate with me by completing your section of the study. Do not be afraid to answer any of the questions frankly.

Thank you for your patience in reading this letter, and for your cooperation.

Yours sincerely,

Alan Hellyer

Alan Hellyer.

THE ST.PAUL STUDY

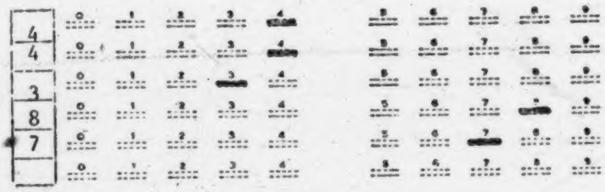
This study is designed to allow Administrators, Teachers, Parents, Students and School Employees to express their views about the local High School, as it relates to the community. Your views are important to this study, so please express them frankly. There are no right or wrong responses. The one that expresses your view is the right one for you.

A separate Answer Sheet is provided for your responses. There is a place on it for your name. As well, you have been given an I.D. number for this study to preserve your identity. Please record your name and I.D. number on the Answer Sheet in the manner shown below.

The responses you make will be confidential. DO NOT OMIT ANY ITEMS.

HOW TO RECORD YOUR I.D. NUMBER

If your I.D. Number happened to be 44387 , you would record it as shown in the example to the right.



DIRECTIONS FOR RECORDING RESPONSES ON ANSWER SHEET

Read each statement carefully. Then indicate whether you agree, probably agree, probably disagree, or disagree with each statement. Mark your answers on the separate answer sheet in the following manner:

If you agree with the statement, blacken the space..................(1)..... ■ B C D

If you are somewhat uncertain, but probably agree with the statement, blacken the space..................(2) A ■ C D

If you are somewhat uncertain, but probably disagree with the statement, blacken the space..................(3) A B ■ D

If you disagree with the statement, blacken the space..............(4)..... A B C ■

All marks should be heavy and completely fill the answer space. If you change a response, erase the first mark completely. Make no stray marks on the answer sheet. Please do not mark this booklet.

ST. PAUL OPINIONAIRE

Instructions:

The following statements relate to conditions which have been said to exist in some High Schools. Please indicate the extent to which you agree that each of the following statements is true of your High School.

Record your answers on the separate Answer Sheet provided. Do this by placing a mark in one of the guide lines as shown in the example. Use an HB pencil. Do not make marks longer than the guide lines. The numbers in brackets at the top of each column, indicate the correct set of guide lines for that answer.

****

Agree (1)	Probably agree (2)	Probably disagree (3)	Disagree (4)

		(1)	(2)	(3)	(4)
1.	Students at this school are a great bunch.	A	PA	PD	D
2.	Teachers work with students to solve learning problems.	A	PA	PD	D
3.	The Principal supervises students very strictly.	A	PA	PD	D
4.	Too much time is wasted on unimportant things.	A	PA	PD	D
5.	A student is just a number, not a person, at this school.	A	PA	PD	D
6.	Teachers are prepared to discuss students' ideas.	A	PA	PD	D
7.	Anything students do well is recognized at this school.	A	PA	PD	D
8.	If a teacher doesn't like a student there is no way the student can do well.	A	PA	PD	D
9.	Teachers don't bother to learn students' names all year.	A	PA	PD	D
10.	Students get disciplined for incomplete assignments.	A	PA	PD	D
11.	Students and teachers have no chance to work together on group projects.	A	PA	PD	D
12.	School authorities try to tell students how to live their lives.	A	PA	PD	D
13.	Teachers try to put students down by using sarcasm.	A	PA	PD	D
14.	Students get praised when they do a good job.	A	PA	PD	D
15.	Teachers get out of school just as soon as they can.	A	PA	PD	D
16.	The courses here are right on what students need to get a job.	A	PA	PD	D
17.	This school really seems to be part of the community.	A	PA	PD	D
18.	The Principal and teachers are against the students.	A	PA	PD	D
19.	Teachers don't prepare for their classes.	A	PA	PD	D
20.	The Principal tells students what courses they will take.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET -- USE THE ANSWER SHEET SUPPLIED

		(1)	(2)	(3)	(4)
21.	This school is unrelated to the real world outside.	A	PA	PD	D
22.	Teachers are always willing to work on community projects.	A	PA	PD	D
23.	There are too many compulsory courses.	A	PA	PD	D
24.	There is a friendly atmosphere in this school.	A	PA	PD	D
25.	Students could drop out of this school and no one would care.	A	PA	PD	D
26.	The Principal continually tries to catch students.	A	PA	PD	D
27.	Students don't learn how to study only what to study.	A	PA	PD	D
28.	Students can establish good relations with teachers at this school.	A	PA	PD	D
29.	There is no freedom here to do anything.	A	PA	PD	D
30.	The Principal is concerned that students get a fair deal.	A	PA	PD	D
31.	Students are encouraged to take part in student government.	A	PA	PD	D
32.	Teachers at this school treat students as real people.	A	PA	PD	D
33.	Teachers use their own time to help students with problems.	A	PA	PD	D
34.	Students get recognition when they do a good job.	A	PA	PD	D
35.	Teachers help students realize they have something to give to people.	A	PA	PD	D
36.	Students can talk freely with teachers here.	A	PA	PD	D
37.	Teachers take the trouble to explain the importance of a subject.	A	PA	PD	D
38.	Teachers cooperate with each other.	A	PA	PD	D

DO NOT RECORD YOUR ANSWERS ON THIS SHEET -- USE THE ANSWER SHEET SUPPLIED

Please continue to the next page and complete the questions there.

ST. PAUL TEACHERS' QUESTIONNAIRE

Instructions:

In completing these questions, please check or circle the desired response. Few questions require a written answer. Please do not omit any items. Please be sure to record the name of your school and your I.D. number for this study immediately below.

Name of School: ____________________ Your I.D. No. ________

****

1✓ How many years have you lived in this area?
1 - 2 3 - 5 6 - 9 10 - 15 16 or more

2. Do you plan to . . . stay in this area permanently? ____
move in a year or so? ____
move as soon as possible? ____
My future plans are uncertain at present. ____

3. Do you now . . . live with parents? ____
own your own home? ____
rent but do not plan to buy? ____
rent now but plan to buy soon? ____

4. Please circle your present age group
21 - 29 30 - 39 40 - 49 50 - 59 60 or over.

5. Sex: Male Female

6. Are you . . . married? single? engaged?

7. Is your husband/wife employed in St. Paul County? Yes No N/A

8. Is your husband/wife a teacher? Yes No N/A

9. Did you grow up in . . . this County? this Province?
this Country? another Country?

10. Did you grow up in . . . a rural area? a small town?
a large town? a city?

11. How many miles do you live from where you teach/work?
0 - 1 2 - 3 4 - 5 6 - 7 8 or more

12. What position do you hold in this school?
Principal Vice-Principal Dept. Head Teacher Non-teacher

13. What are your long-range plans?
To continue teaching/working in this school? ____
OR To seek promotion in this school? ____
OR To seek promotion elsewhere? ____
OR To give up teaching altogether? ____

14. How many years of teacher education have you completed? ____yrs.

15. Counting this year, how many full years have you been teaching? ____yrs.

16. How many full years have you taught in this County? ____yrs.

17. How interested would you say you are in High School/Community affairs?

Very interested	Interested	Undecided	Not interested	Not at all interested

18. How satisfied are you with the amount of information the local community appears to have about the High School?

Very satisfied	Satisfied	Undecided	Not satisfied	Not at all satisfied

19. In your opinion, how does the local community get most of its information about the High School?

a. from news media?
b. from the Principal or teachers?
c. from other school employees?
d. from their children?
e. from the neighbours?

20. How desirable do you think it is that teachers should live and teach in the same community?

Very desirable	Desirable	Undecided	Not desirable	Not at all desirable

21. How many parents of High School students do you know well enough to visit socially?

None 1 - 2 3 - 4 5 - 6 7 or more

22. In this community, how active are you in . . .

22.	. . . Social activities?	Very active	Some activity	No activity
23.	. . . Sporting activities?	Very active	Some activity	No activity
24.	. . . Service activities?	Very active	Some activity	No activity
25.	. . . Church activities?	Very active	Some activity	No activity

THE ST. PAUL TEACHERS' OPINIONAIRE

Please continue to the next page and complete this Opinionaire. Instructions for its completion are the same as those given at the beginning of this booklet. Record your answers on the Answer Sheet, in the section headed Teachers' Opinionaire. Do not omit any items, please.

1. Details, "red tape," and required reports absorb too much of my time A PA PD D

2. The work of individual faculty members is appreciated and commended by our principal A PA PD D

3. Teachers feel free to criticize administrative policy at faculty meetings called by our principal A PA PD D

4. The faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the board of education A PA PD D

5. Our principal shows favoritism in his relations with the teachers in our school A PA PD D

6. Teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work A PA PD D

7. My principal makes a real effort to maintain close contact with the faculty A PA PD D

8. Community demands upon the teacher's time are unreasonable A PA PD D

9. I am satisfied with the policies under which pay raises are granted A PA PD D

10. My teaching load is greater than that of most of the other teachers in our school A PA PD D

11. The extra-curricular load of the teachers in our school is unreasonable A PA PD D

12. Our principal's leadership in faculty meetings challenges and stimulates our professional growth A PA PD D

13. My teaching position gives me the social status in the community that I desire A PA PD D

14. The number of hours a teacher must work is unreasonable A PA PD D

15. Teaching enables me to enjoy many of the material and cultural things I like A PA PD D

16. My school provides me with adequate classroom supplies and equipment A PA PD D

17. Our school has a well-balanced curriculum A PA PD D

18. There is a great deal of griping, arguing, taking sides, and feuding among our teachers A PA PD D

19. Teaching gives me a great deal of personal satisfaction A PA PD D

20. The curriculum of our school makes reasonable provision for student individual differences A PA PD D

21. The procedures for obtaining materials and services are well defined and efficient A PA PD D

22. Generally, teachers in our school do not take advantage of one another A PA PD D

23. The teachers in our school cooperate with each other to achieve common, personal, and professional objectives A PA PD D

Continue with item 24 on next page

24. Teaching enables me to make my greatest contribution to society .... A PA PD D

25. The curriculum of our school is in need of major revisions .... A PA PD D

26. I love to teach .... A PA PD D

27. If I could plan my career again, I would choose teaching .... A PA PD D

28. Experienced faculty members accept new and younger members as colleagues .... A PA PD D

29. I would recommend teaching as an occupation to students of high scholastic ability .... A PA PD D

30. If I could earn as much money in another occupation, I would stop teaching .... A PA PD D

31. The school schedule places my classes at a disadvantage .... A PA PD D

32. Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc. .... A PA PD D

33. My principal makes my work easier and more pleasant .... A PA PD D

34. Keeping up professionally is too much of a burden .... A PA PD D

35. Our community makes its teachers feel as though they are a real part of the community .... A PA PD D

36. Salary policies are administered with fairness and justice .... A PA PD D

37. Teaching affords me the security I want in an occupation .... A PA PD D

38. My school principal understands and recognizes good teaching procedures .... A PA PD D

39. Teachers clearly understand the policies governing salary increases .... A PA PD D

40. My classes are used as a "dumping ground" for problem students .... A PA PD D

41. The lines and methods of communication between teachers and the principal in our school are well developed and maintained .... A PA PD D

42. My teaching load in this school is unreasonable .... A PA PD D

43. My principal shows a real interest in my department .... A PA PD D

44. Our principal promotes a sense of belonging among the teachers in our school .... A PA PD D

45. My heavy teaching load unduly restricts my nonprofessional activities .... A PA PD D

46. I find my contacts with students, for the most part, highly satisfying and rewarding .... A PA PD D

47. I feel that I am an important part of this school system .... A PA PD D

48. The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar .... A PA PD D

Continue with item 49 on next page

49. My school provides the teachers with adequate audio-visual aids and projection equipment .... A PA PD D

50. I feel successful and competent in my present position .... A PA PD D

51. I enjoy working with student organizations, clubs, and societies .... A PA PD D

52. Our teaching staff is congenial to work with .... A PA PD D

53. My teaching associates are well prepared for their jobs .... A PA PD D

54. Our school faculty has a tendency to form into cliques .... A PA PD D

55. The teachers in our school work well together .... A PA PD D

56. I am at a disadvantage professionally because other teachers are better prepared to teach than I am .... A PA PD D

57. Our school provides adequate clerical services for the teachers .... A PA PD D

58. As far as I know, the other teachers think I am a good teacher .... A PA PD D

59. Library facilities and resources are adequate for the grade or subject area which I teach .... A PA PD D

60. The "stress and strain" resulting from teaching makes teaching undesirable for me.... A PA PD D

61. My principal is concerned with the problems of the faculty and handles these problems sympathetically .... A PA PD D

62. I do not hesitate to discuss any school problem with my principal .... A PA PD D

63. Teaching gives me the prestige I desire .... A PA PD D

64. My teaching job enables me to provide a satisfactory standard of living for my family .... A PA PD D

65. The salary schedule in our school adequately recognizes teacher competency .... A PA PD D

66. Most of the people in this community understand and appreciate good education...... A PA PD D

67. In my judgment, this community is a good place to raise a family .... A PA PD D

68. This community respects its teachers and treats them like professional persons........ A PA PD D

69. My principal acts as though he is interested in me and my problems .... A PA PD D

70. My school principal supervises rather than "snoopervises" the teachers in our school .... A PA PD D

71. It is difficult for teachers to gain acceptance by the people in this community .... A PA PD D

72. Teachers' meetings as now conducted by our principal waste the time and energy of the staff .... A PA PD D

Continue with item 73 on next page

73. My principal has a reasonable understanding of the problems connected with my teaching assignment .... A PA PD D

74. I feel that my work is judged fairly by my principal .... A PA PD D

75. Salaries paid in this school system compare favorably with salaries in other systems with which I am familiar .... A PA PD D

76. Most of the actions of students irritate me .... A PA PD D

77. The cooperativeness of teachers in our school helps make my work more enjoyable .... A PA PD D

78. My students regard me with respect and seem to have confidence in my professional ability .... A PA PD D

79. The purposes and objectives of the school cannot be achieved by the present curriculum .... A PA PD D

80. The teachers in our school have a desirable influence on the values and attitudes of their students .... A PA PD D

81. This community expects its teachers to meet unreasonable personal standards .... A PA PD D

82. My students appreciate the help I give them with their school work .... A PA PD D

83. To me there is no more challenging work than teaching .... A PA PD D

84. Other teachers in our school are appreciative of my work .... A PA PD D

85. As a teacher in this community, my nonprofessional activities outside of school are unduly restricted .... A PA PD D

86. As a teacher, I think I am as competent as most other teachers .... A PA PD D

87. The teachers with whom I work have high professional ethics .... A PA PD D

88. Our school curriculum does a good job of preparing students to become enlightened and competent citizens .... A PA PD D

89. I really enjoy working with my students .... A PA PD D

90. The teachers in our school show a great deal of initiative and creativity in their teaching assignments .... A PA PD D

91. Teachers in our community feel free to discuss controversial issues in their classes .... A PA PD D

92. My principal tries to make me feel comfortable when he visits my classes .... A PA PD D

93. My principal makes effective use of the individual teacher's capacity and talent .... A PA PD D

94. The people in this community, generally, have a sincere and wholehearted interest in the school system .... A PA PD D

Continue with item 95 on next page

95. Teachers feel free to go to the principal about problems of personal and group welfare .... A PA PD D

96. This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff .... A PA PD D

97. This community is willing to support a good program of education .... A PA PD D

98. Our community expects the teachers to participate in too many social activities .... A PA PD D

99. Community pressures prevent me from doing my best as a teacher .... A PA PD D

100. I am well satisfied with my present teaching position .... A PA PD D

Thank you for your cooperation. I am very mindful of the amount of time, effort and thought you have contributed to this study, and I appreciate it greatly.

NAME ______________________________
Last First Middle

FACULTY or SCHOOL ______________________________

AGE ______ Years
YEAR or GRADE ______
☐ Male ☐ Female
DATE ______ Day Month Year

I. D. NUMBER

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

1. THE ST.PAUL STUDY

PART 1.

2. The St. Paul Opinionaire

Indicate response by placing a mark between the guidelines as shown in the example. Use HB pencil. Don't make marks longer than guidelines.

Example

1	1 2 3 4		10	1 2 3 4		19	1 2 3 4		29	1 2 3 4								
2	1 2 3 4		11	1 2 3 4		20	1 2 3 4		30	1 2 3 4								
3	1 2 3 4		12	1 2 3 4		21	1 2 3 4		31	1 2 3 4								
4	1 2 3 4		13	1 2 3 4		22	1 2 3 4		32	1 2 3 4								
5	1 2 3 4		14	1 2 3 4		23	1 2 3 4		33	1 2 3 4								
6	1 2 3 4		15	1 2 3 4		24	1 2 3 4		34	1 2 3 4								
7	1 2 3 4		16	1 2 3 4		25	1 2 3 4		35	1 2 3 4								
8	1 2 3 4		17	1 2 3 4		26	1 2 3 4		36	1 2 3 4								
9	1 2 3 4		18	1 2 3 4		27	1 2 3 4		37	1 2 3 4								
						28	1 2 3 4		38	1 2 3 4								

Answer Parents' and Students' Questionnaire and Teachers' Opinionaire below this line.

1	1 2 3 4 5	26	1 2 3 4 5	51	1 2 3 4 5	76	1 2 3 4 5
2	1 2 3 4 5	27	1 2 3 4 5	52	1 2 3 4 5	77	1 2 3 4 5
3	1 2 3 4 5	28	1 2 3 4 5	53	1 2 3 4 5	78	1 2 3 4 5
4	1 2 3 4 5	29	1 2 3 4 5	54	1 2 3 4 5	79	1 2 3 4 5
5	1 2 3 4 5	30	1 2 3 4 5	55	1 2 3 4 5	80	1 2 3 4 5
6	1 2 3 4 5	31	1 2 3 4 5	56	1 2 3 4 5	81	1 2 3 4 5
7	1 2 3 4 5	32	1 2 3 4 5	57	1 2 3 4 5	82	1 2 3 4 5
8	1 2 3 4 5	33	1 2 3 4 5	58	1 2 3 4 5	83	1 2 3 4 5
9	1 2 3 4 5	34	1 2 3 4 5	59	1 2 3 4 5	84	1 2 3 4 5
10	1 2 3 4 5	35	1 2 3 4 5	60	1 2 3 4 5	85	1 2 3 4 5
11	1 2 3 4 5	36	1 2 3 4 5	61	1 2 3 4 5	86	1 2 3 4 5
12	1 2 3 4 5	37	1 2 3 4 5	62	1 2 3 4 5	87	1 2 3 4 5
13	1 2 3 4 5	38	1 2 3 4 5	63	1 2 3 4 5	88	1 2 3 4 5
14	1 2 3 4 5	39	1 2 3 4 5	64	1 2 3 4 5	89	1 2 3 4 5
15	1 2 3 4 5	40	1 2 3 4 5	65	1 2 3 4 5	90	1 2 3 4 5
16	1 2 3 4 5	41	1 2 3 4 5	66	1 2 3 4 5	91	1 2 3 4 5
17	1 2 3 4 5	42	1 2 3 4 5	67	1 2 3 4 5	92	1 2 3 4 5
18	1 2 3 4 5	43	1 2 3 4 5	68	1 2 3 4 5	93	1 2 3 4 5
19	1 2 3 4 5	44	1 2 3 4 5	69	1 2 3 4 5	94	1 2 3 4 5
20	1 2 3 4 5	45	1 2 3 4 5	70	1 2 3 4 5	95	1 2 3 4 5
21	1 2 3 4 5	46	1 2 3 4 5	71	1 2 3 4 5	96	1 2 3 4 5
22	1 2 3 4 5	47	1 2 3 4 5	72	1 2 3 4 5	97	1 2 3 4 5
23	1 2 3 4 5	48	1 2 3 4 5	73	1 2 3 4 5	98	1 2 3 4 5
24	1 2 3 4 5	49	1 2 3 4 5	74	1 2 3 4 5	99	1 2 3 4 5
25	1 2 3 4 5	50	1 2 3 4 5	75	1 2 3 4 5	100	1 2 3 4 5

PART 2. THIS SECTION FOR USE BY STUDENTS ONLY

1 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
2 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
3 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
4 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
5 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
6 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9
7 (	0	1	2	3	4	5	6	7	8	9
	0	1	2	3	4	5	6	7	8	9

IBM 504

CAUTION — AVOID PLACING ANY MARKS AMONG THE BLACK TIMING LINES

OVERPRINT ANSWER SHEET

APPENDIX F

RAW DATA COLLECTED IN THIS STUDY

```
RAW DATA    ----    TEACHERS    ----    SCHOOL  A
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 45  TEACHER RESPONSE TO STUDENT SATISFACTION SCALE
COLS 48 - 72  TEACHER PERSONAL DATA
CARD 2
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 80  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 1 - 73
CARD 3
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 34  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 74 - 100

10011  11244114121441332444424144314111211111  5124112221514343122252323
10021  12444114444441432444324144414111112111  4122112221522243222452123
20031  11344114434441411444414144214111111111  5125212221141255212252323
20041  11144114414441411444414144214111111111  5125112211541155112252223
20051  21344224434331222432423143414111222111  5123211221241244234342323
20061  21244112414331432442424144414111111111  2441113311143222224232123
20071  21244114424421411444424144414111111111  3432111121141243223352223
20081  21234124433322243332323232322222222222  5124112222141255224252222
20091  21144124114141231442414133312111111111  1133112142141242124152121
20101  21344112323232232432313143313121212121  4133111211141255122252222
20111  21344224424232432444424144314111111121  5411113321441333214232123
20121  21324114434441242434334244414211212112  5122212211543133234252323

10012  4111441414421422141221114143441214311114141141111111414213411111111111441
10013  114113131214111121111111441
10022  1132131234223112142241112112144124444114141121112211141442141124421121441
10023  114214142224114121112122441
20032  4111441414411411141111114111142114111114141141111111414111411111111111441
20033  114114141114111111111111441
20042  4121441124412422142211114121244314122114141141111111414111411112221114 41
20043  114114141114111121111111441
20052  3122431414422422142222123221134214112123141132112221141431341111221111441
20053  114213142224122222112121342
20062  4111441414412312242121134231134314213114141141112111141421241121222111441
20063  114114142313111111112121341
20072  4412441444424414312221122221444214244244112144214241141422442141442221442
20073  224124232424122221412121342
20082  4332442323322422242222232222233232222232422422222222424222422222222222332
20083  224224242224222222222222342
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20092  411124141442141424112211212112322312211414214113211124141233111312112341
20093  113212131123111122112121341
20102  411144131442231224122111311114412421124141141112121141412241111111221341
20103  114113131223122222222121441
20112  311144143441142214223111422133421423312114114211111114142224122222211341
20113  114414142214112122111121441
20122  4231443412442314142421224111244423112224343241221321142441442321422222412
20123  224324241224122132222222442


RAW DATA    ----    STUDENTS    ----    SCHOOL  A
    EXPLANATORY NOTES
CARD 1
COLS 1 - 5  STUDENT I.D. AND CARD NUMBER
COLS 8 - 45  STUDENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 61  STUDENT PERSONAL DATA
COLS 64 - 66  0 = NO PARENT RESPONSE
              4 = PARENT RESPONSE HAS SIMILAR I.D. NUMBER
              267 = I.D. NUMBER OF PARENT IF 4 NOT APPROPRIATE
COLS 67 - 80  I.D. NUMBERS OF TEACHERS - IN PAIRS OF DIGITS

51011  23424441333233232232332332331234443432 422211121242233  4  01020506080910
51021  21344112444431322442323243114111111112 442211222222133  4  01020508091011
51031  22441114444314124444441144414111111111 442211134132133  4  02091011
51041  22324231222223142413332231122111222111 412111324312323  4  01020405060810
51051  23344334444112144311243411124434434241 512212345412333  4  0102091011
51061  21234223432431221433433234314121222222 442111222222233  4  01020406081011
51071  12344111432413122431441214141213444132 542112124422223  4  01020306050911
51081  11244113424422331411424213214211112211 412212224212333  13301020304050608
51091  12314121443323331343441134324113233221 242112124221123  4  06090501030811
51101  11244113444221141341341142312232412111 234112124212223  4  03010506080402
51111  22444111444431211444424234414121211121 422112124131233  4  01020304050608
51121  42144222423432322332423233323221222111 442112234222323  4  01020311060908
51131  14144342441112211131421232122144432231 212212234213223  4  01020304050608
51141  42121441111213122221231211142122421411 542212242321123  0  01020305060910
51221  41344111444132114441111241211121411111 542221222222122  0  030507091012
51241  22334223433322233323332233232222222121 542332234212233  1050205070811
51251  21444114424421441444414244114111111212 542222224222222  4  0407050302
51261  31244124434442444441141141114321424121 542231522113333  4  0205070811
51271  22344124434332422342322144324112222121 543232324313233  4  010507
51281  13144212433432322342321132423332323212 542332234312233  4  0102050709
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51291  14134211431434321332441132233332433212  542232344212333  4  0105070902
51301  133143224122431313424222332231112221 23  221221234412233  4  0106091012
51331  222442224344222412413212313232122222 22  532332234212133  4  010507020907
51341  223343224341722211231323242123212212222  532232231232233  4  0102050709
51351  141133221432113232243232334212324231 2222  541232124421223  4  01020709
51381  143143314241411214421132313242112133 12  542221254122122  4  02030507091012
51391  132432314341311413442441311242112232 11  242111144211123  4  0102050609
51431  231442244113124114313111411232431212 11  422222114111133  4  0205071012
51451  221133224134131413333232112432244332 32  442212212122133  4  01020305060910
51461  111321433344333224413311112122223222 11  543212222212123  4  02060510
51481  112442244224213313322333322242322322 11  442112224312233  0  02050610010309
51551  232443414322241223412312312334344431 32  242111112323123  0  01020405060910
51581  123142114244412114424123244221112211 11  542221334342223  1010204050708091 1
51591  214341334244212313224432423141111121 22  522222234211223  4  02030407091201
51601  114442244244441412444424244444121112 112  431222224232322  4  020405070912
51611  212441244342223424434241432141112211 21  521222324212232  4  030507091112
51621  411132114122422424412314114114234141 21  442221434333333  4  0507091012
51631  214441344342223424444241432141112211 21  222222224212232  4  030507091012
51641  214341344243121314414432423141111121 12  422222234211223  4  09030507101201
```

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RAW DATA    ----    PARENTS    ----    SCHOOL  A
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5   PARENT I.D. AND CARD NUMBER
COLS 8 - 45 PARENT RESPONSE TO STUDENT SATISFACTION SCALE

41011  43113211323341131442424144414111112111 433212133222421222223
41021  11114224414431421443434233223112211221 511525413111111442223
41031  1114411312214241143432314444232313131 543512123322431113233
41041  23434421411211241141442411112312131141 513412133324422212333
41051  13412311344112144341144311124214414141 513321242321432412313
41061  21234224433441221444423134414121222121 513321232221211123323
41071  12214241433413144411441224113212442223 513421223114412342322
41081  22244213434422441411422213124211122221 113321222324212222322
41091  23414231441123141431444234234212432131 213212133143411312233
41101  21424111444341441432422222114222412111 343323212232422212322
41111  11334113414212124443343234313112311233 533321233322412242222
41121  42234222423432322332423243323222222222 513512113223421222323
41131  1414444141411111122143441112244412441 213221223224422411221
41241  13412311344112144341144311124214414141 513321242321432412313
41251  31442211444212311444432123424122311211 513321223412412122322
41261  44412441444142141411411414124412424111 513412122224412123333
41271  11234112424442421432233232213131212121 512312123322223212222
41281  111342214244322223433232323232321122 543321223222432332332
41291  12134223432332411434331142213131322121 513321222222422122323
41301  24114411414441141411411141114111111141 244221224415412212222
41331  22244213434422441411422213124211122221 113321222232421222322
41341  12144114444242321434424144424111121111 513412123122222132532
41351  21124114444141411411414141114111411111 513421211211214222322
41381  22223332414221142233443221324211223322 513221223324422332321
41391  22344222323332232333323223223232322222 113221223124421212233
41431  11134114412411421441421141424121211111 51[illegible]25223423422212111
41451  12134112413312142432323241324112323232 443412121225412123233
41461  2123313433433322342322123313222222112 512412422213421212322
41581  43113211323341131442424144414111112111 433212133222421222223
41591  21234213443441334432333144414132221122 513512123322421322323
41601  11444334424441422444424244414121222222 433321133122422223333
41611  21234223434221222441424143214111222121 513321124422421312333
41621  31244124414141332441323221113332422111 413422123123431323322
41631  11444121424222441444424143214112111121 243512423423421243333
41641  21114211414412122431414142214121322121 443312333222432352311
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RAW DATA    ----    TEACHERS    ----    SCHOOL  B
    EXPLANATORY NOTES
CARD 1
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 45  TEACHER RESPONSE TO STUDENT SATISFACTION SCALE
COLS 48 - 72  TEACHER PERSONAL DATA
CARD 2
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 80  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 1 - 73
CARD 3
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 34  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 74 - 100

10161  11234123424442432444321144314411122121  5423212211111255124252222
10171  11444114424431431444311144414111112111  3231112224124233224152222
20181  12234223424432341444423144314111222121  5441211111141222124252322
20191  12244114444431421444424144414111211111  2441111131141222144152221
20201  11344220244442231442313133214122222221  1235112212141155232252333
20211  21434123423432233444323244214112222331  2423213311141252144152222
20221  12344121434231331444424144314111222221  5423243313143351144352321
20231  22334213414421142444232124224112212224  1122112224144211224313232
20241  22423223332432133433232334224212222223  1422123333144231334213233
20251  11224143442321111442324142114121112111  1431213322143211224233233

10162  1212441324432421141243221111324313221134242141113221141331231121432211431
10163  114123131213112114112121232
10172  3114441444222223242211134231334414333124141231113221121441232121422211321
10173  144113141314111111111142442
20182  2112441424421424341342112112144124224124141241223211241442441111432211441
20183  114212241223123122112112441
20192  4111441424412414141241123111144314132124141141124111141441441122222211441
20193  114114242324121121112112341
20202  4112432423422322133223222122233413221114221232211111131111331142121111441
20203  114123131423212122111121431
20212  3111442314322321341432322221244214222234242142111211241421341122232211322
20213  114223332424123123222222441
20222  4111441314331411241211222111144214111134142141121111221431341111422111431
20223  124112121214122121111121441
20232  4311541315443144344411432443323223314114142314414411233233411244333112231
20233  113443233433323324223123234
20242  1232112312134123224233343444443323444223232243443443233432412242444422112
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20243  223433323434133333244333244
20252  1122441324332411141222114111444113211124141141222111221422142111222111431
20253  114213341214132122112111441


RAW DATA    ----    STUDENTS    ----    SCHOOL  B
    EXPLANATORY NOTES
CARD 1
COLS 1 - 5  STUDENT I.D. AND CARD NUMBER
COLS 8 - 45  STUDENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 61  STUDENT PERSONAL DATA
COLS 64 - 66  0 = NO PARENT RESPONSE
              4 = PARENT RESPONSE HAS SIMILAR I.D. NUMBER
              267 = I.D. NUMBER OF PARENT IF 4 NOT APPROPRIATE
COLS 67 - 80  I.D. NUMBERS OF TEACHERS - IN PAIRS OF DIGITS

52021  12144121433211322444312133313222121221 542221224241122  2201719222425
52031  41134121422331423444131343411141121121 531212124221222  4  17181921222425
52041  21414224444341143444123234313212222222 532112332232222  4  22181920242523
52051  32144223423342222444223133313221322112 442111234222222  4  17181920222324
52061  21344112434333432444223143213112222111 542211135332222  4  17182021222324
52091  21244211413122221444333233123242231233 542211154132122  4  17181921252422
52101  12244112433212341412333122114232123222 541211224141122  267181920222324
52111  21344133434341443444324123313121111121 542212322322222  4  17181921222425
52121  11234113424241142334421242213112112222 542111124311122  4  161718192122
52131  21234223323332332444323243323122222311 442112222322322  4  17181921222425
52141  12344222434231411344434144414111121211 441112224232242  4  17181920212524
52151  11344123334342343434323143313221122111 442112124252111  4  17181920212425
52171  11244114424441311444424134414111111112 541212122121122  4  17181921222425
52181  12334124444222421442424143214111222111 411112224232232  4  16181921222425
52191  32234121434434131442324133413221231112 512112224222212  4  17181921222425
52201  11244121433222322433222133413122121122 542212224251222  4  17181920222425
52211  11444113421441331444424144413111111111 542212224242322  4  17181921222425
52221  21244122444323223343443323233221121111 432112214211232  4  17181921222425
52231  12124121424432421441411142214111111111 542211122242122  4  16171819202324
52251  11344124434431321433424144414111221111 442112222242222  4  18212417192225
52281  21144112424111311441412241411212111314 441112134121112  4  171819212425
52291  11244123424441321443424133214111112212 522222434122333  4  1921222425
52301  22224114444211342444341344224113124224 542222234422322  4  161718212219
52311  11434333323423241444341234232324234242 522222234222122  264202224
52331  11244124424441411444414144414111111111 542221212152222  4  1719212225
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52341   22244224434241431442432243423221222122  522222224222322  4   1618252419
52351   11444114444441411444114144414111111111  521222144131211  22816171920212225
52361   11144113444431311344322133313211212211  541222224353232  4   17192021222425
52371   12134223423322442333332232323242223322  532221224312322  213171821222425
52381   21244113434421332444411144314111112111  522222132231312  255171921222425
52391   11244131444444342434334144414111241132  522222224321212  222171921222425
52401   12244124444443411444314132214111122111  541322524252122  4   16171920222425
52411   11144112414441421442424143114111111111  542221122251112  4   1719212225
52421   41244113414441421444423144414121111111  522222224222322  4   171921222425
52431   41344223434442442444423124314221221121  542222224232322  4   22201924
52441   11244213414431111434414144414111111111  542222211312211  4   171921222425
52451   11144114414441411444414144444111111111  522222122141111  4   171920212225
52471   22244114434442432443444344214111112111  512221224232122  4   171921222425
52481   21134124443441243443122242113122222221  135321454323333  0   17192224
52491   42234212434221221333441143322221212223  522221144221122  0   17181921222425
52501   21441444414111443442211334114112121322  542221124113122  2031718192122
52511   21344222413424342444323243323122222321  522222224122222  21316171819122224
52541   12144213414332141444421144314111121121  522222132121122  4   19202224
52551   22234222424332422434412234414112121112  542232324322323  4   192224
52561   21344223424333411442333144124122322121  522331141142122  4   18192024
52571   12434123444432432434423144424121112111  542231122141122  4   1619202122
52581   22334233423332342133222133213221122111  531331112252223  01617192122
52591   11224122433322222333322243212221122222  542331234122233  22217192122
52611   12224212412422111334124123313111212222  541231124222122  21724162019182125
52641   24434124432422431442321144423242122212  532332344122221  4   192224
52651   11234123433422441434423134213112111112  542332134221322  255192224
52661   11344223434432321434422134224111112121  542232214341223  4   17212219
52671   12434114433121243444331144314111313112  541332434142323  4   24221925
52691   12324332441222312443121243214113222343  332232254111233  4   1920212224
52701   12134344443431341444413141422111111321  231232324122322  4   1618192025
52711   22123222424321232341322231114122122212  542332124312222  0   16181924
52721   12334232113323321344433143314111222122  142232121242122  4   18192124
52731   22423243334232243424233344314131112222  241232334312222  0   1618192124
52741   13334232433432343434333233213231112221  532232244313233  0   1719212224
52751   31144111414414441444411114414141111141  541332341111113  4   16181922
52761   23414241422341241443224124133122413112  532232234322222  4   192224
52781   43144414424141443424441144122113413213  331332334223322  0   162224
```

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RAW DATA    ----    PARENTS    ----    SCHOOL  B
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5   PARENT I.D. AND CARD NUMBER
COLS 8 - 45 PARENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 67 PARENT PERSONAL DATA

42021  11234121433222321433222143313122121112 513312123112224252222
42031  22134114414342132444433143413112211121 533421223114213251211
42041  21414224444341143444414344114113411141 513312123222412232322
42051  11234211443232111442413113324111222222 513412133122212242321
42061  22234221134242231432413124113121211221 513312123124522212321
42091  21244113434421131444221432141111111112 513312133121423232222
42101  11244122434421211434242143314111211121 513312133412232221111
42111  13114244434441331443314241424111112211 543412113124431233332
42121  11114213414231142442321142124122212222 513421223114432412221
42131  21314223423443242433333243313111221212 513321223124432212332
42141  22334222441432311431424144314111222121 513221223312412232222
42151  21134113423331221414424144314111111111 513312123112223251211
42171  11244212111121211444424134414111111122 513421223212413241111
42181  22334222441432311431424144314111222121 513221223312412232222
42191  22234221134242231432413124113121211221 513321223124522212321
42201  11234121433222321433222143313122121112 513312123112224252222
42211  11234113430343132443414144314111111111 513321233112433233321
42221  21124113424441132444434142214111211111 513412123112212342322
42231  12413222434322311443434144414111221221 543221233113222442222
42251  11344113444431331443312144414111111111 513321233411435242321
42281  11144114444441411444414144414111111111 513421223311412132312
42291  41444113414441321444412143414111111111 513312123122222221231
42301  23312321444213112312433344144423433243 513221223233422312322
42311  11234214434442341442421144314121212221 543312323222422232221
42331  21114114414441411444414144414111111111 513521232112141313332
42341  22244224434241431441432243423221222122 543512323322422332221
42351  11144114444441411444414144414111111111 513421223311412132312
42361  12134114444441111444444144211111211111 513412123122212241211
42371  21314223423443242433333243313111221212 513321223124432212332
42381  22234111434432222444312134314111111112 545412123112122123212
42391  21124113424441132444434142214111211111 513412123112212342322
42401  21244113434442411444424141214111111111 513321221222413252222
42411  11134112414441411442422143114111111111 513312133112212141111
42421  11414111441411143444423134424121412243 543424331354452413333
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[illegible]431  41444111434441431344324224114211221222  513311123424522212321
42441  11144113414431111424313144414111111111  511421223322211112321
42451  21344122424441311444414144414111111111  513221233111215152222
42471  22244113434441231443414134214111111121  513321233112222232322
42501  2213411441434213244433143413112211121  533421223114213251211
42511  21314223423443242433333243313111221212  513321223124432212332
42541  11144112414441441444411144214111111131  513421223112242212222
42551  22234111434432222444312134314111111112  545412123112122123212
42561  11244114414341311443214141213111111111  5133212234[illegible]12121211
42571  12434123444434332434433144424121112111  513352123122[illegible]13242122
42581  11234123424442432444321144314411122121  543321141112422252222
42591  21124113424441132444434142214111211111  513412123112212342322
42611  11244212111121211444424134414111111122  513421223212413241111
42641  11234214434442341442421144314121212221  543312323222422232221
42651  22234111434432222444312134314111111112  545412123112122123212
42661  11344113444431331443312144414111111111  513321233411435242321
42671  11244122434421211434242143314111211121  513312133412232221111
42691  11214221444122132441411313224123122124  313321233115414432552
42701  11141111441421441444413143424111111121  213221223112411212121
42721  11444114414441411444414144414111111111  113221223321412122323
42751  11141114111411111444414144114111111111  513321223212222242222
42761  22414214444341143444414344114113411141  513221233222241323232
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RAW DATA    ----    TEACHERS    ----    SCHOOL  C
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 45  TEACHER RESPONSE TO STUDENT SATISFACTION SCALE
COLS 48 - 72  TEACHER PERSONAL DATA
CARD 2
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 80  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 1 - 73
CARD 3
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 34  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 74 - 100

10311  11444114434432431444424144314111112121  5144112211111244122152311
10321  11244114424441442444231144441411111111  4124111112524254124552222
20331  12134223424332421433333143212212222122  3142112211141233234252123
20341  22222244414441231443313133313111112111  1431113322141211124112231
20351  11444124434441431444441414431411122211  1432223332141211232212233
20361  22144124423432421443334142314111222111  5142112211141233234152123
20371  12144124434442422444423144324112221211  1421112124143211112152121
20381  11134114414441411443424142314111111111  5124211222144243124152222
10391  11344114124441421443424244414111211111  5124111221131255144252212
20401  21444114414421441444324144414111111111  2431112233144222244352123
20411  12112424224222442231211231122123224212  2233111242143252244132222
20421  22234233423422442444424234314111222111  3235112243144233244152231

10312  1214441414422411141111114111244224111124241141111111141411142111321222441
10313  114124141114111112211111441
10322  4342241244114124141211441414441243141441411422111111141422441144424411231
10323  144112142423124121112241142
20332  1334222314332313241222223221233323222321324223211222223142233232222222332
20333  224223232323122223222322332
20342  213133133332231213112111311111332121111131311311121111213113311111111111331
20343  114124131113111111111111131
20352  2111441414422424151121125111255215111111515114111121115141225112112121211451
20353  115115252115111111112111551
20362  3221442444422411141121123211144223332234242131212111231412232121231222342
20363  214114141324122121212212341
20372  3332343414442441142131134221244434213314343441121112231431243432442342432
20373  314114241224132134323421331
20382  2122442413322412141222214111134124111115132211212221132412141121121211342
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20383  224114231123122121112122341
10392  1133311314423412142221123331324214222124241232212221141321222131322211341
10393  113124232113222322112222332
20402  4742442314423333242211143331334223224214343242123121141412342222422422231
20403  114124231424122141211212441
20412  2442242224244424444242241242412444324231442441414321141442442342444323121
20413  214134312421124243124422242
20422  2224431344322224241221123211233423232214132232214221241432441121432311341
20423  114124241124122221223243441


RAW DATA    ----    STUDENTS    ----    SCHOOL  C
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5  STUDENT I.D. AND CARD NUMBER
COLS 8 - 45  STUDENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 61  STUDENT PERSONAL DATA
COLS 64 - 66  0 = NO PARENT RESPONSE
              4 = PARENT RESPONSE HAS SIMILAR I.D. NUMBER
              267 = I.D. NUMBER OF PARENT IF 4 NOT APPROPRIATE
COLS 67 - 80  I.D. NUMBERS OF TEACHERS - IN PAIRS OF DIGITS

53011  22124122433441323443432142214312311112 442111535122233   4  36423534394033
53021  12344222433132112444322112113111321112 542211324212223   4  31333435363942
53041  21333212413321113443433143323132222221 532111344213333   4  3633424131
53051  22134223414231211331312141212312212222 542332122152122 03932374042313334
53061  22234123424442341434323242124232223212 522331324122223 38032334031
53071  44133341443112444422144421321443434422 532231225223133   4  32334042
53081  23113331421124344211131111121333344243 532332354132223   4  32334042
53091  22124331313213344341442211122332234211 542231144133133   4  32374041
53121  21234223323333333333323231223222323222 532211224212223   4  34353639404142
53141  12344244411114442441214141324111423221 422112324212232   4  31333536384042
53151  22144213423312322443323233323222222222 442112124132123   4  36354033423938
53161  32142232413242412341311231122412232211 242111324122323   4  34353633394041
53171  11244122423441321442424142214121212111 442112224212123   4  33363839404235
53181  11243122432332422433323133313112111111 432112222122133   4  33353638394042
53191  12234221442332342321421233333213344322 542212124412221   4  31333536384142
53201  21244214423331311442412243423111112221 441112412112322   4  31333536383942
53231  22234241411234222332323123324211122131 442211244222223   4  33343536394042
53241  22134441411444441422423233123241324121 522212242323322   4  40354131363938
53251  21334223433432422443322133313222312222 542212234312133   4  31363335383940
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53261   11124124421442441441421144222111223112   542212224113225   4   3033363842
53271   11444112421422342241341241232143422312   412212224211223   4   42333838363135
53281   12134222433332232342331223223222323332   542212244221223   4   33353638394042
53291   12144221413312124441443243313213122211   522212121331212   4   35364142393831
53301   41433241412123334242321422322433233321   142212344313333   4   31353638394142
53311   23113222433223332331121131123332322242   532331124211123   4   3236374042
53321   23122322413133344342431211222343323221   542331234222223   4   32364041423133
53331   11114133414414141112144411141414144141   521231214252223   4   3339414232
53341   23222211232222312222323221123232222221   542331244241113   4   4241393632
53351   22113222412233342343432211224222332231   512331234222223   4   363932404142
53361   12124231434113142111121321112334333321   342231555312223   3233236374041
53371   21144312422414412442424341223444224411   412211124121113   4   36313342
53381   23133431433213323232232211141344434343   532232334512133   4   39404142
53391   42123422413133342331331321121232332321   432231234222323   362404142
53401   11114342422424144131111411141113441121   222331132251122   4   313236404142
53421   12234212423442232433323233232222322222   522332224112223   30239404143
53431   12144223423312321443412113423211222122   142332224212222   4   373839404142
53441   24243421424423434341421431421222233431   245332334413223   0   39414042
53451   32244223243441341443322212213241323211   542332344253313   4   39404142
53461   43244122414342433341333432323321223131   521232344232322   4   3739414042
53471   12114212431141222334433244412212423122   542232424312233   4   4237394041
53481   12144231434112444141142411141433424422   145232354522323   4   3839404142
53501   21314411443414241331141211212314424212   532232224212332   4   3739404142
53511   22334313433432322433324133313222222222   542222334212333   4   353637394142
53581   21124224423442411443424123114221122221   332222324313333   4   3638354139
53591   23133421442132332242132231141324423432   421222324322323   4   413639384231
53601   34334321342132331331322231342244423423   321322433532333   4   35394142
53611   12144241411322333441431131123222123242   522222221222223   4   37324041383136
53621   41144111414121444441441141114212114143   422222244222222   4   3740413231
53661   12114221423442131443332132322221322331   522222224322323   4   3536373941
53711   11144223414242211444412132423211122221   441221224222221   4213233374041
53721   14121442412213444141231311141444334443   332231231422233   0   3132374041
53751   13134223413242322343333241121432323212   541221234232223   4   3132333740
53761   2213433342343312333332221133232334132   542221234122133   4   36333942
53771   1123322341233231234333322323212122321   522222424112255   4   37383640414232
53781   31144123424332322341323141114311112111   522222224222232   4   36384033323137
53791   31134123414332322443413233323221122222   541222122232122   03854122212224211
53821   43234242412314321441323442231113344212   522222424211223   4   3240373141
53801   22244123434442422442322241212231222221   522222224232223   4   3336384042
53811   21244213413342221433323122223222222211   541221424212121   4   3336394142
53831   42111144431444444341121442111142144232   531221534323333   4   31323336374042
53851   12124322113314121441311121114111321111   541221112122133   4   39423336
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53861  42234122414423422442321342223112222311  541222424312323  4   31363839404142
53871  22112221413432443442331242223122222211  532222334312223  0   313237384041
53881  31234323414232423441242342112114124222  522221222122232  4   31323337404142
53891  23134332432333322332233231123322233321  541221122242152  4   32313334374041
53911  12133311414211421342431141132343423412  422222344212332  42431323741
53921  14111331441312222141322321141432333342  522222222312213  4   31323740
53931  22134221412112242331241121123212223322  522222214211232  4   31323337404134
53941  11134222424442211444223133313111212111  541221124241122  4   313233374041
53951  42414221434442324343424424424112322111  232112554313333  4   31363338394042
53971  12112411423322443241221211241323422321  542212254321223  4   42333938404135
53981  11144214114444421442324211424112212111  441411311122122  4   31323336394042
53991  24114442313224333331231441133223443432  531211412212322  3843136394042
54001  32113212423442332343423222221423422121  421111224212222  4   4133343642
54011  23243111243442341443431122214141211111  512211154552123  0   31333436394042
54021  12344223443342322444422233313222222322  442211334232223  4   3133364142
54051  22334133433423322333223223213222323232  542211332332233  4   39404142
54061  42411111211114241144142411141414244412  541211325321213  4   333440414236
54071  32334344112111341233321331223323322232  142211434222232  4   31343940414233
54081  11244223314222213342341233213211211211  432111234242122  0   39363140343342
54091  32142232413242442341311131122412232211  542211322132223  4   34313334394142
54101  22244212443441422343444231113321224241  522331124122133  0   32393640414231
54121  14214311432411332333333141111133313142  542212234312223  33842393831414033
54141  21111214423431111444423144414121111241  442112222132222  4   31333638394042
54161  22211241414111324331424142114111121114  542211111321123  4   313334394042
54211  11244242424424321433422133412111221231  441332224122221  4   413240
54231  11234123423332322343423232313221122222  145331334122333  0   3240333742
54241  11234242113434142441321141122321233321  442231424211233  4   31323336374042
54251  21344233423442221443432133313211322222  542332224222233  4   32314041373442
54261  11124331433143344332233112122123223212  532231424323333  4   31323336404144
54271  23134233434343411341421133113222233232  542332224132223  31532374042
54281  12144211414121321212211111111212212311  232232144331223  4   31333637384041
54301  22144332433333443342433234223222233332  412331244112222  4   32374042
54311  21114113413332334432233333323211124111  542331224132123  4   32334042
54321  12134321322132232332231121222333223323  542332244212233  4   31323336373840
```

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RAW DATA     ----     PARENTS     ----     SCHOOL  C
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5   PARENT I.D. AND CARD NUMBER
COLS 8 - 45 PARENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 67 PARENT PERSONAL DATA

43011  22424122433442123443422131214312311112 543412133124422212332
43021  12344221422314144444341311121212424241 513412123433451212333
43041  32344221422422113443333213323232222222 543412123425422223332
43051  11344114124441421443424244414111211111 513412141114422252212
43061  22334223432441432433322232223221222122 513221233122412252223
43071  33233223432332323442334244223222322222 513321122323452213333
43081  21133232324222334332243332124313222232 514312131134422442313
43091  22124331313213344342442211122332234211 513411212343411313333
43121  21234222421332432443324241123221322122 543221223122212312223
43141  12344132413114442441414242334113332313 513321221332421212332
43151  32144214424431214431444244324112211222 513312133122222332123
43161  12121223412432322443424243223212222212 214221231222422212222
43171  12134221313421321443224233214111211112 543221233334421322323
43181  11244123334332221443212143313111211111 513221233122412222233
43191  23444111444111221321431123114312312222 543221233123442312222
43201  21244214423331311442412243423111112221 413221232232223132322
43231  23231331111314124444233334143323334333 413221233422432213221
43241  22323222332222323232333233222111222222 543221233222422222322
43251  21334223431441332321141122124221411121 513221221234331213333
43261  41134124421442442441421143422111222112 543312323222221242332
43271  11344311413431443442434143411121422411 413321223422432223333
43281  23312331342232131432131323223211322232 543421224434442222313
43291  22133331413112114441432231414111111212 513422123222212151311
43301  32413121411122334342321321333122332121 143321223424432313333
43311  32133223113332441433324232232322222222 543321243332422212333
43321  23214421334212243432322231223334432222 543312133223432413233
43331  11114111424211211421413143314111111111 543321143122412242322
43341  11214111414221421441423211412212111211 543412123122422222122
43351  11111211111144441414411111414111141111 513421423432421223333
43361  23231331111314124444233334143323334333 413221233422432213221
43371  11114114444141111144123111113121431441 513512123344421333322
43381  11134213422432322442313142224122322132 513412114333412232223
43391  22144111411111444311121141123121113142 543311123124421412232
43401  22123232413433242434141211222322432222 213321223323411323332
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43711   31234122413432321333422243323111121222  443321233122414242221
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43761   12134124422332322432333141113121222122  513312123222451242212
43771   14323321222232141223411212223122422242  513312123323122212221
43781   21144123424332331442324143214211112111  544512131122432222223
43791   11134114414441411443424142314111111111  513421141112412252222
43811   22224223413232232433323222313121222221  515421224423422222321
43801   22334223432441432433322232223221222122  513221233122412252223
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43831   21214114422232412441441444141111121111  513321233222422222322
43851   12214322114413121431312122123121321221  513321221325212251221
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43881   22234224423332432431333143313123323222  513221243112214152211
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43911   23113421411121132341411131123234312212  443221223413442212332
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43931   12134221413112231322211112213212223222  543421243212421222212
43941   11132222424442211444223133313111212111  513212132222422222221
43951   42423344342233132433322313323222323222  513215123233441221322
43971   12212211422121433241221111232223323332  513412123234421322333
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44281   12144212424431421444413142121212112211  213321213322422213323
44301   22144332433333443342433244223222233332  313421233333411113333
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44321   11124224423431321442423131324111111222  513421132422421222223
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RAW DATA    ----    TEACHERS    ----    SCHOOL  D
    EXPLANATORY NOTES
CARD 1
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 45  TEACHER RESPONSE TO STUDENT SATISFACTION SCALE
COLS 48 - 72  TEACHER PERSONAL DATA
CARD 2
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 80  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 1 - 73
CARD 3
COLS 1 - 5  TEACHER I.D. AND CARD NUMBER
COLS 8 - 34  TEACHER RESPONSE TO TEACHER MORALE SCALE  --  ITEMS 74 - 100

20511  11121122424231142443424142114111211133  3421253322141111344432323
20531  22244114443441132424434234114211312222  5123211212141255224352212
20541  21344214423441332444333144214112212112  5425112211144355331252222
10561  12433232434432232434333323214212212223  2421112221133332244152212
10571  11433223224432222444324144314111122121  5123112111211344124152311
20581  12324314442231421444434233314231113121  5141211111141222234252123
20591  23413224434231223433343233224212312122  1422112231142241234242232
20601  22313224433441323443324223223222112122  2422111121144242112352333
20631  22444214424441423434424244413212212122  2122111121143232144251113
20651  11233114434241421414323233413211111112  3122111121141243132152223
20661  21334114423441422443424243214111212322  5124111142141255341242321
20671  11224224424112221414434144414122222221  2123211122141252124152223
20681  11344114434441432444424144414111111111  5122211211541255224252222
10691  22323223333322333333333233223313322222  3423111221121353221152222
20701  12444124422442332444424244324111212222  4423211222143254124152211
20711  22344114434441231444224144314111211122  5155223324141355224252311
20721  11234134423341113444323233313212132122  1232212222143231244413233
20731  22333324443431322443333223324332232222  4124111121141254224252222
20741  11224223423231222444323142214212212122  5123112222141211244352233
20761  11234124414341422444424142314221121121  1231112223143211254152123
10771  11444224423342321444412134213212112221  4123111231121254242152322
20781  22334112433421232433223133224212113222  1431112222141111334213232
20791  22224224423331222434423212224211212222  5122111111141222124252222
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20811  11244114424431311444414234314121111121  5211223311143211244342123
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20831  22223124323431223443323333232322222222  3431113311141233234342133
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20533   113314231224122142113112341
20542   5232442424423421241211123222144424422214242241111132132411342121442322231
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10563   31422323232322312233323332
10572   411144142442142124121111412214412411112414114211112113141[illegible]412111212114 41
10573   114114141214121122111111341
20582   1232332421344321142332223112233224212222233221211222212422242232211223333
20583   223223232224122122223222331
20592   3244243344343331133212333332334433322213342342321232212312333332432333322
20593   233223232323223232233322332
20602   2344133424432322231232224122333333242223243431324233222323443322222233423
20603   233323332333231122333322232
20632   2244242344343322231322223141344434443344243341211112112412142332432323232
20633   234223222222112113233232332
20652   3332342332333132232312323122133333323214322221212211123412232332232232333
20653   224214141223223123133332332
20662   4221342414332322243312334331324123212214213243313321242312141311122212332
20663   212124232424221322213122442
20672   2231342414421411241211212112144124111114242141112111142411142211211221441
20673   214114241124121122121231441
20682   411144141441141114111111412114411411211414114111111114141114111111111111441
20683   114114141214111111111111441
10692   3233332324333421131132213111234224413213242241221211121411132221422212332
10693   124214231324121123121121231
20702   323134241442241213114323111244324221214242241212212112411241221122222332
20703   114224231223122122122211341
20712   4221551515412511151122215111155215111115151151112122132412141111222211443
20713   114214231124122111111111451
20722   12311132223333141231222122112143434322342334321222132212442242423233332122
20723   224223132234122112224442121
20732   423223232132342223222222222133224222223232232212232232322232322222322232
20733   213223232333222223222322322
20742   3023332434333322242322223132314223423221232231213122122312332232232423222
20743   224223332323332222233222342
20762   2113212331122214221222111111244424143113312231114211121431442322423223441
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10772   2221233324242311141121113111144133311224333331111111141411143111322332323
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20782  3212332414423313141442222121333323232222332232212221132233232322432221322
20783  213222231124323131234233331
20792  3221332313332322242222232222332232222232332322222222232322232222222222222322
20793  223223232324223222222222332
20802  2144242344422331141212224131432224222234242222211121122412422234432222443
20803  213114132423112222222222332
20812  32314524154223211221121232213342141111142422412111121122111411211222211441
20813  114114221212122111112211341
20822  4222241411431311121112314121144213321224232341231112213412142111222322322
20823  224424242224232132223322441
20832  323223333333332232223234332333224423223233232121122232412232242432322322
20833  224223222322222222223332332
20842  2222432423423322242212222232244224222224242242212222122412222222221222332
20843  2242242322232232222222221442


RAW DATA    ----    STUDENTS    ----    SCHOOL  D
    EXPLANATORY NOTES
CARD 1
COLS 1 - 5  STUDENT I.D. AND CARD NUMBER
COLS 8 - 45  STUDENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 61  STUDENT PERSONAL DATA
COLS 64 - 66  0 = NO PARENT RESPONSE
              4 = PARENT RESPONSE HAS SIMILAR I.D. NUMBER
              267 = I.D. NUMBER OF PARENT IF 4 NOT APPROPRIATE
COLS 67 - 80  I.D. NUMBERS OF TEACHERS - IN PAIRS OF DIGITS

54571  11244114414441312444414144313111212211 514532342252232  4  51
54611  1233223233441432323442342313233223322 421222334122222  4  51637175818453
54621  11214113423441211444321143314111121112 531222124431223  4  51586265687385
54631  22314343332333223444432143244221333233 542222344232223  4  5162656879
54641  23134243433432322434333212113112332112 144332224251211  0  5154617071
54651  41144231414421311443431324112131232111 532332324122222  4  5160
54671  12434221333331233332333243224232211221 535222213552233  0  51677381627185
54691  21114421414341214414121414141211213212 522212214122233  4  51585573798183
54701  11243121334131422341242111124131112312 532212244323223 46951587383648281
54711  22344123233441412444322133313121221112 442112334212323  4  51807355588381
54721  12424113434122311341424243213211221211 522222324122332  4  516668
54731  22344414443231221323421324114122321221 435332231122233  4  517184
54761  11444222423442321444423243324111112111 341112324222323  4  587779815155
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54821  12142221432221224241421122113123432141  521221534213333  0  7673526866
54831  22234411434322211344322144414112322121  522321412213333  8145866687377
54861  11244122434442311443313122113211222111  541221324223232  0  64825859657476
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55611  22334314434441411222121313323142423131  543222244111222  4  51707377816758
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55691  32433232424322311334323131123232422311  441112234222332  4  72558561828481
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RAW DATA    ----    PARENTS    ----    SCHOOL  D
     EXPLANATORY NOTES
CARD 1
COLS 1 - 5   PARENT I.D. AND CARD NUMBER
COLS 8 - 45 PARENT RESPONSE TO STUDENT SATISFACTION SCALE
COLS 47 - 67 PARENT PERSONAL DATA

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